Jacob's Ladder Trail Scenic Byway Study

Becket • Chester • Huntington • Lee • Russell

Highway and Safety Analysis

FEBRUARY 1994

PIONEER VALLEY PLANNING COMMISSION

JACOB'S LADDER TRAIL SCENIC BYWAY STUDY:

- EXECUTIVE SUMMARY
- CULTURAL RESOURCES INVENTORY
- **HIGHWAY AND SAFETY ANALYSIS**
- LAND USE STRATEGIES
- LANDSCAPE INVENTORY AND ASSESSMENT

Prepared by the
Pioneer Valley Planning Commission
under the direction of Timothy W. Brennan, Executive Director

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JACOB'S LADDER TRAIL SCENIC BYWAY PROJECT

Background

The Pioneer Valley Planning Commission (PVPC) received funding under the FY92 Interim Scenic Byways Program for the purpose of recognizing, preserving and interpreting the scenic beauty and historic properties along the Route 20 corridor from Russell to Lee, Massachusetts, commonly referred to as Jacob's Ladder Trail. This Jacob's Ladder Trail (JLT) area, and in particular the stretch of Route 20 which runs from Russell to Lee, has been recognized even in these modern times as an area unspoiled by commercial franchises, flashy signs and grid development. Instead, the corridor is dotted with quaint little villages and shops, neatly kept historic houses and impressive natural beauty of rock and river. In addition, the project was to prepare the Jacob's Ladder Trail communities for an increase in participation by visitors in the various local cultural and recreational activities by providing adequate public facilities and access to natural and man-made places of interest. A final purpose was to put into effect local controls to provide the maximum protection for the natural and historic resources of the corridor through land use planning tools. The underlying principle of these objectives is to allow economic growth to occur without having a negative impact on the scenic and historic character of the Jacob's Ladder Trail Scenic Byway.

Overview Of Phase I

The FY92 Phase I Jacob's Ladder Trail Scenic Byway Program was initiated in February 1993 and consisted of four major components, historic preservation, transportation, land use and economic development/tourism. The historic preservation activities focused on completing historic resource inventories for the purpose of submission of sites and districts to the National Register of Historic Places. In addition, a landscape inventory was conducted along the corridor so as to assess the scenic and aesthetic qualities of the highway. The transportation assessment included an analysis of highway and safety conditions along Route 20 for both bicycle and motorist use. The land use assessment included a detailed review of the five communities zoning bylaws with suggested revisions to address potential development concerns along the highway. A tour book was published which promoted bicyclist and motorist use of the Jacob's Ladder Trail and its immediate area. In addition, much of the data which was collected was put into a series of GIS overlays and mylar base maps to be used in the ongoing assessment and management of the Byway.

A "Jacob's Ladder Trail Advisory Committee" was also created in Phase I and served to help oversee the project and its direction. This committee consisted of representatives from all five communities, the local business association, an area bicycle shop owner and cyclist, Massachusetts Highway Department officials, Berkshire County Regional Planning Commission and the Pioneer Valley Regional Planning Commission.

Overview of Highway and Safety Analysis

This document provides a technical evaluation of the transportation components throughout the corridor. Roadway, bridge and abutment facilities were examined to determine structural and service conditions. Traffic operations and safety measures were calculated for areas throughout the corridor for identification of hazardous travel conditions. An evaluation was also conducted for determine the feasibility of designating the corridor as a route for bicycle usage. Each evaluation conducted as part of the JLT Scenic Byway Project was conducted in accordance with generally accepted practices and procedures for measuring facility serviceability.

The analyses of transportation components conducted for the scenic byway project serve as the basis for recommendations to improve and enhance the serviceability of the JLT corridor. Descriptive condition status of each component is presented to identify present deficiencies and are prioritized for improvement action. The resulting action plan will then be evaluated and appropriately scheduled in later phases of the JLT scenic byway project.

Study Area

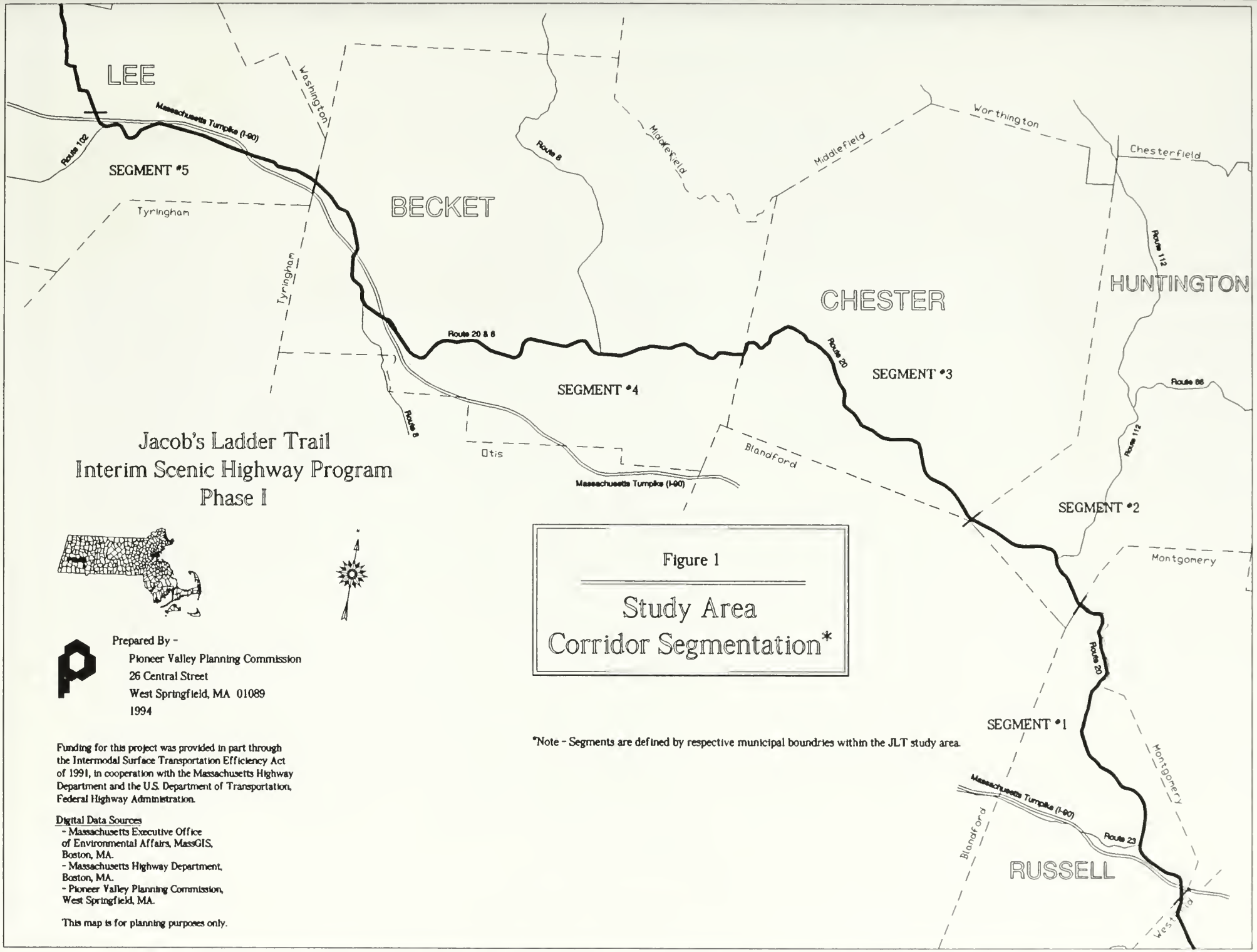
The JLT corridor follows State Highway Route 20 from the Westfield and Russell municipal line and continues westward through Russell, Huntington, Chester, Becket and terminates in Lee at the town common. The total length of the corridor is approximately 31.5 miles. The study area extends beyond the confines of the JLT corridor where appropriate, such as along major collector roadways and areas of significant recreational use potential (i.e. bicycling and walking trails).

The study area corridor is entirely under the jurisdiction of the Massachusetts Highway Department. Route 20 is the major highway which interconnects the hilltowns with metropolitan Springfield and Pittsfield and beyond to neighboring regions and states. Throughout the study area there is an almost total reliance on the automobile for mobility since no public transit accommodation is available.

Segmentation of JLT Corridor

The total length of the JLT corridor within the scope of the Scenic Byway Project comprises 31.53 miles. To facilitate management of the data collection and analysis activity, the study area was divided into one mile sections. These one-mile sections were then grouped within each town, thereby creating five different town-specific segments. Each segment contains the number of sections that corresponds to the number of miles contained therein. Miles were measured from east to west starting at the Westfield and Russell municipal line. The segments are divided as follows:

1. Russell: sections 1 - 7.5
2. Huntington: sections 7.5 - 10.5
3. Chester: sections 10.5 - 17
4. Becket: sections 17 - 27.5
5. Lee: sections 27.5 - 31.5



Jacob's Ladder Trail
Interim Scenic Highway Program
Phase I

Figure 1

Study Area Corridor Segmentation*

*Note - Segments are defined by respective municipal boundries within the JLT study area.

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1994

Funding for this project was provided in part through the Intermodal Surface Transportation Efficiency Act of 1991, in cooperation with the Massachusetts Highway Department and the U.S. Department of Transportation, Federal Highway Administration.

Digital Data Sources
- Massachusetts Executive Office of Environmental Affairs, MassGIS, Boston, MA.
- Massachusetts Highway Department, Boston, MA.
- Pioneer Valley Planning Commission, West Springfield, MA.

This map is for planning purposes only.

METHODOLOGY

Data Collection

PVPC staff conducted a detailed field study to identify the existing physical conditions of the study area and to observe traffic operations along the JLT corridor. The field study included an extensive inventory of corridor's length, width, shoulders, sidewalks, curbing, guardrails, signage, major intersections, embankments, pavement markings, and retaining walls. All of this information was used in the condition and distress evaluation conducted for each of the transportation components.

In order to measure the travel demands and patterns along the JLT corridor, Average Daily Traffic counts (ADTs) were conducted for typical week day 24 hour periods at various mid-block locations within the study area. Traffic count data was collected along Route 20 at the following locations: west of Route 23 in Russell, north of Route 112 in Huntington, east of Middlefield Road in Chester, north of Route 8 in West Becket, and east of Route 102 in Lee. Counts conducted in Russell, Huntington, and Chester by the PVPC were conducted during the month of May. ADT counts were also provided by Berkshire County Regional Planning Commission for sections of Route 20 within its region, Becket and Lee. All daily traffic counts were adjusted to average annual conditions.

Pavement Management

Pavement inventory and distress data were collected by PVPC staff during the month of May 1993. This data was applied to the pavement management software package, "The Road Manager", which is an inventory and analysis package developed by Christman Associates.

The Road Manager uses a Pavement Condition Index (PCI) as a measurement of roadway serviceability and as a method to establish performance criteria. PCI was generated for each inventoried roadway segment of the JLT corridor using distress data collected by PVPC staff. Deduct values assigned to each type of distress based on severity and extent were applied to generate a PCI for each roadway segment. PCI is measured from 0 to 100, with 100 being an excellent condition and zero being poor condition. The PCI values generated are grouped into PCI category ranges which are defined by the user depending on the type and functional class of each segment.

The PVPC incorporated five default repair categories: (1) reconstruction, (2) rehabilitation, (3) preventive maintenance, (4) routine maintenance, and (5) no action. Reconstruction involves the complete removal and replacement of a failed pavement section. The rehabilitation of pavements includes the work necessary to restore the pavement to a condition that will allow it to perform satisfactorily for many years. Preventative maintenance activities are those which are performed at strategic intervals to protect and seal the pavement. Routine maintenance activities are those which are taken to correct a specific pavement failure or area distress.

A list of repair strategies was developed based on the PCI ranges and road characteristics such as the base, functional class, pavement type, curb reveal, drain index, and utility index. The repair strategies simulate decisions which are consistent with the Massachusetts Highway Department (MHD) repair practice and procedures. The Road Manager uses the repair strategies to assign a repair type to each roadway segment. Detailed and summary reports are produced by the Road Manager and can be sorted by street name, PCI, or benefit value. This

report provides the most recent survey condition information collected on the segments as well as the required repair types, associated costs and benefit value calculations.

Safety Management

Traffic accident data for the JLT corridor study area was obtained from the MHD Traffic Engineering Section. Accident location, frequency, severity and type were analyzed for a period of three years (1989 - 1991) to identify any common conditions and possible causes. The accident rate for each segment was also identified in order to determine a pattern of high hazard occurrence. This rate measures the number of annual accidents per one hundred million vehicles miles traveled. Considerations were made for low volume segments that may reflect excessively high accident rates.

Bridge Management

Data for all bridges located along the JLT corridor from Russell to Lee was obtained from the MHD Bridge Listing dated April 1993. Bridge information collected included condition ratings, structural evaluation, American Association of State Highway and Transportation Officials (AASHTO) ratings and bridge status. Also, planned improvement activity for the study area bridges was researched with MHD.

Bicycle Route Feasibility

To determine the feasibility of a Bicycle route along the JLT corridor several actions were considered. A field inspection was conducted by PVPC staff consisting of an actual bicycle ride using the roadway's travel lane and shoulders. Research was conducted regarding federal requirements for bicycle routes according to facility type and service. Research also included the classification standards for bicycle service according to the type of terrain. The information gathered form these activities was evaluated to determine the appropriateness or feasibility of bicycle route designation along the JLT corridor between the towns of Russell and Lee.

CONDITION FINDINGS

Segment Inventory

Russell Segment: Sections 1 - 6.5

This segment of the JLT corridor is approximately 6.5 miles in length and starts at the Westfield - Russell Town line; ending to the west at the Russell - Huntington Town line. The Route 20 highway is a two-way undivided roadway which runs in an east-west direction and provides one lane for each direction of travel. The road width varies from 24 feet at the Westfield Town line to 37 feet near the Huntington Town line. Along the first four miles of this segment shoulder width varies from seven to ten feet and reduces to two feet along the remaining 2.5 miles. Shoulders on the northern side of Route 20 taper down at mile four to accommodate a climbing lane for traffic. The same alignment is also found at mile six on the southern side of Route 20. No sidewalks are present, except for a small section on the northern side of Route 20 starting at Highland Street which measures less than a mile. Most of the northern side of Route 20 has asphalt curbing along with steel on wooded posts guardrails.

Pavement markings include centerlines and edge lines. Center lines are the painted glass bead type. The condition of the pavement markings is good, except for mile four and five of this segment where markings can barely be seen. Embankments can be found at several locations along this segment and rock retaining walls can be found at specific locations. At mile number three there are two steel retaining walls on the southern side of Route 20, and mile number six has two small rock retaining walls. Also, a deteriorating concrete retaining wall can be found in the Crescent Mills section after the two small rock retaining walls. The main intersections along this segment are located at the Strathmore Mill entrance, Blandford Road (Route 23), Blandford Stage Road and West Main/Main Street.

Huntington Segment: Sections 7.5 - 9.5

The second segment extends approximate three miles from the Russell - Huntington Town line to the Huntington - Chester Town line. This segment of the JLT corridor provides for one lane for each direction of travel. The road width varies from 27 feet at the Russell Town line to 24 feet at the Chester Town line. Shoulders are narrow, ranging from two to three feet. This segment does not have any sidewalks or curbing, except, along portions of both side of Route 20 in the village area. Steel on steel posts guardrails are present. There is a rock retaining wall for a little over a tenth of a mile near mile seven. Pavement markings include painted glass bead centerlines and edge lines. The markings condition is relatively fair although there are some instances were the centerline is worn out. The main intersections found along this segment include Route 112 (Worthington Road) and Blandford Road.

Chester Segment: Sections 10.5 - 16

The third segment of the JLT corridor extends to approximately 6.5 miles from the Huntington - Chester Town line to Berkshire County. This segment is characterized by its winding road alignment. The road width is 24 feet at the eastern end of the segment and 26 feet at the western end. Shoulders are narrow ranging from two to three feet. Pavement markings include double yellow lines and edge markings. For the most part the condition of the pavement markings is fair, except for sections that are worn which tend to be where curves are sharp enough to have vehicles cross centerline markings. Sidewalks and granite curbing are found only along the town center at mile 14. Steel on steel posts guardrails can be sighted throughout this segment. Embankments are located near mile 10, 12, and 15, some of these embankments have significant grades. A severely deteriorated concrete retaining wall is also located near mile 15. Main Street, Hampden Street and Blandford Road are the main intersections on this segment of Route 20.

Becket Segment: Section 17 - 26.5

The fourth segment is the longest and extends approximately 10.5 miles from the Berkshire County line to the Becket - Lee Town line. This segment is characterized by its many curves and vertical alignment. The road width varies from 25 feet at the county line to 31 feet at West Becket. Shoulder width varies from two feet to four feet, however, at the county line the southern side shoulder is almost 13 feet wide. Sidewalks on both sides of the street are only found at mile 17. There is one steel retaining wall located near mile 17. Steel on steel posts and steel on wooded posts guardrails are found throughout this segment. Pavement markings include fading centerlines and edge lines, except for fairly new glass bead center lines found around mile 23 and 24. The main intersecting roadways located along this segment include: Route 8/Bonnie Rigg Road (Four Corners), Hamilton Road, and Route 8 (West Becket).

Lee Segment: Sections 27.5 to 31.5

The fifth segment that was studied extends from the Becket - Lee Town line to the Lee town center at the intersection of Route 20 and Main Street. It is approximately 5 miles in length. As with the other segments Route 20 provides one lane for each direction of travel. Pavement markings include yellow centerlines, lane markings, and edge lines. Shoulders are narrow ranging in width from less than one foot to three feet. Sidewalks are found at mile 30 and 31 and are approximately 6 feet wide and show signs of deterioration. Steel on steel posts guardrails are found along this segment. Unlike previous segments this segment has a high development density with mixed land uses along the road with numerous curb cuts. The Massachusetts Turnpike Interchange # 3 is located at the western end of the Route 20 Corridor. The main intersections in this segment include: Route 102, the Mass Pike, High Street and Main Street.

Streets and highways are grouped into separate systems according to the character of service they are intended to provide. Route 20 links cities and towns and provides intracounty service. The segment of Route 20 between Russell and Lee has been classified by the Massachusetts Highway Department as a rural minor arterial. Table 1 summarizes the traffic and roadway characteristics of the five communities within the study area.

Table 1

TRAFFIC AND ROADWAY CHARACTERISTICS

Jacob's Ladder Trail Scenic Byways Project

Community	Posted Speed Limit (MPH)		1993 ADT	Lane Width		Shoulder Width		On-Street Parking
	Minimum	Maximum		Minimum	Maximum	Minimum	Maximum	
Russell	35	40	5,628	11' 6"	14' 6"	2' 0"	10' 6"	No
Huntington	30	50	2,672	12' 8"	14' 2"	2' 0"	7' 0"	No
Chester	30	50	3,690	11' 9"	12' 9"	2' 3"	3' 5"	No
Becket	30	45	1,400	12' 4"	13' 0"	2' 0"	4' 0"	No
Lee	30	50	5,460	8' 5"	14' 2"	None	3' 7"	No

Source: PVPC field survey jaclad.xls

The Massachusetts Highway Design Standards specify basic design controls for rural arterials. A comparison of the existing conditions currently found in the segments of the JLT corridor

between Russell and Lee and the highway design standards indicate that for the most part Route 20 conforms to the recommended standards. The five segments comprising the JLT corridor meet the basic design controls for speed, vertical alignment, LOS, and travel lane width. However, the usable shoulder width available in those segments of the JLT corridor is less than the recommended design standard (6 feet) for that type of highway.

Pavement Management

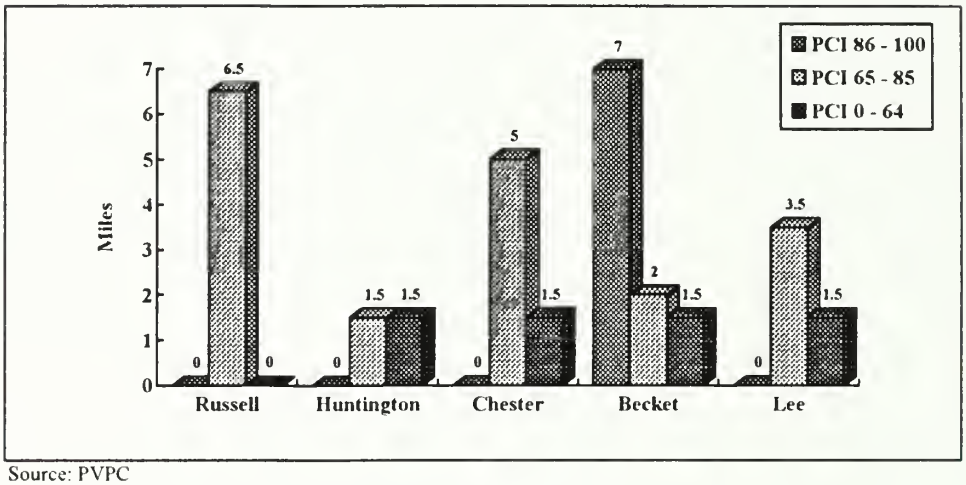
The PVPC staff surveyed the 31.5 mile section comprising of the JLT corridor between the Town of Russell in Hampden County and the Town of Lee in Berkshire County which constitutes 32 roadway segments. The entire section was divided into one mile segments except the third segment in Russell due to a change in the pavement. The average PCI for May 1993 was rated at 78, which indicates that majority of segments are in a moderately fair condition. The PCI condition survey analysis of roadway segments is broken down as follows: 22% of the segments have a PCI greater than 86 (good to excellent), 59% have a PCI between 65 and 85 (fair), and 19% have a PCI less than 65 (poor).

Figure 2 summarizes the existing segment conditions for each community. This figure illustrates miles of roadway within each PCI category. At least half of all roadway miles in each community is in fair or good condition. As seen, the town of Becket is the only community that has roadway segments in the high PCI range, while half of the town of Huntington's segments are in the bottom PCI range.

Figure 3 summarizes each roadway segment's PCI by community. The figure also presents the corridor's overall average PCI relative to each segment PCI. Since the analysis is conducted for a continuous corridor, this figure is useful in identifying the best and the worst surveyed roadway segments in relation to their location. Table 2 lists the JLT corridor segments, the respective PCI rating, the required repair type, and estimated improvement cost. This table listing is presented in ascending PCI order (worst to best).

Figure 2

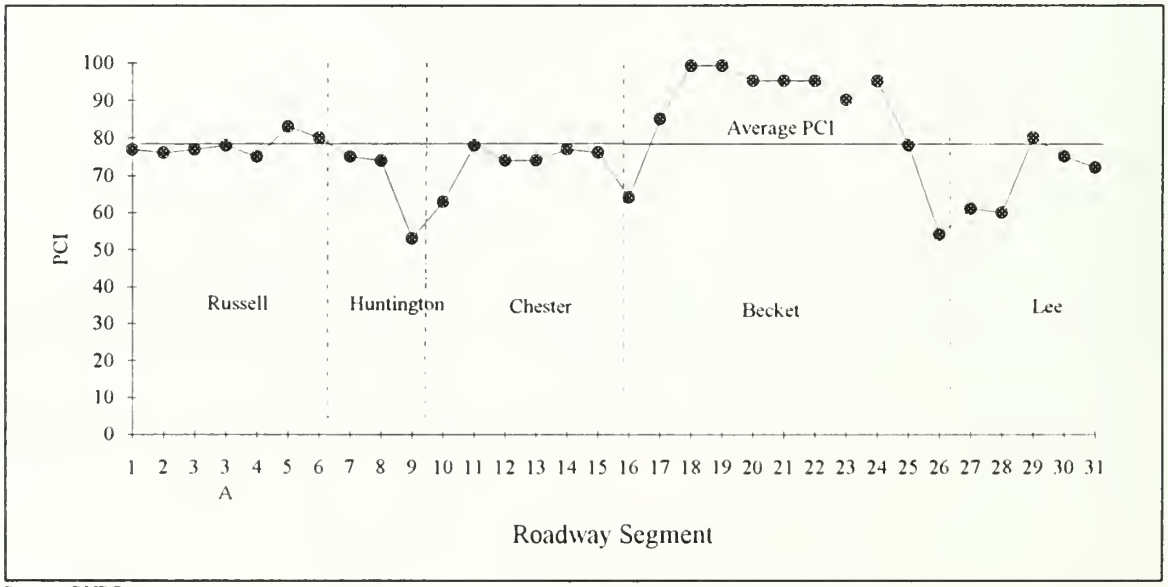
ROADWAY CONDITIONS MAY 1993
Jacob's Ladder Trail Scenic Byway Project



Source: PVPC

Figure 3

PCI DISTRIBUTION BY SEGMENT
Jacob's Ladder Trail Scenic Byway Project



Source: PVPC

Table 2

PCI LISTING OF ROADWAY SEGMENTS IN ASCENDING ORDER

Jacob's Ladder Trail Scenic Byway Project

Street Name	Section ID	Length (ft)	PCI	Repair Type	Cost ($)
Route 20 (Huntington)	9	5280	53	1	469,333
Route 20 (Becket)	26	5280	54	1	440,000
Route 20 (Lee)	28	5280	60	2	154,000
Route 20 (Lee/Becket)	27	5280	61	2	154,000
Route 20 (Huntington)	10	5280	63	2	154,000
Route 20 (Chester)	16	5280	64	2	154,000
Route 20 (Lee)	31	5280	72	3	46,816
Route 20 (Huntington)	8	5280	74	3	50,160
Route 20 (Chester)	12	5280	74	3	50,160
Route 20 (Chester)	13	5280	74	3	50,106
Route 20 (Russell)	4	5280	75	3	53,504
Route 20 (Russell/Huntington)	7	5280	75	3	50,160
Route 20 (Lee)	30	5280	75	3	46,816
Route 20 (Russell)	2	5280	76	3	66,880
Route 20 (Chester)	15	5280	76	3	50,160
Route 20 (Russell)	1	5280	77	3	66,880
Route 20 (Russell)	3a	3168	77	3	40,128
Route 20 (Chester)	14	5280	77	3	50,160
Route 20 (Russell)	3b	2112	78	3	26,752
Route 20 (Chester)	11	5280	78	3	50,160
Route 20 (Becket)	25	5280	78	3	50,160
Route 20 (Russell)	6	5280	80	3	50,160
Route 20 (Lee)	29	5280	80	3	50,160
Route 20 (Russell)	5	5280	83	3	50,160
Route 20 (Becket)	17	5280	85	4	13,963
Route 20 (Becket)	23	5280	90	4	19,947
Route 20 (Becket)	20	5280	95	5	0
Route 20 (Becket)	21	5280	95	5	0
Route 20 (Becket)	22	5280	95	5	0
Route 20 (Becket)	24	5280	95	5	0
Route 20 (Becket)	18	5280	99	5	0
Route 20 (Becket)	19	5280	99	5	0

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Safety Management

A total of 202 accidents were reported along the JLT corridor during the three year period analyzed, 1989 through 1991. A review of accident types show that 63 or 31% of the accidents involved single vehicle incidents of a vehicle overturning or hitting a fixed object such as a utility or light pole, guardrail, signpost, tree, stone wall, or rock ledge. The significant percentage of single vehicle incidents may be related to the many horizontal curves of the corridor combined with low vehicle densities (i.e. unrestricted travel speeds) and limited visibility conditions (i.e. street lighting, pavement markings, signage). The accident history along the JLT corridor is summarized in Table 3.

The Becket segment experienced the greatest rate of accidents over the three year period researched. During 1989 the accident rate was approximately 333 accidents per one hundred million vehicle miles traveled within the segment. The statewide average accident rate for this type of road is 168 accidents per one hundred million vehicles miles traveled.[1] Fixed object type collisions account for the majority of the accidents in the Becket segment, however, six head on collisions were recorded. One fatality was recorded along the Becket segment as well.

The Russell segment experienced the highest frequency of fatal accidents during the three years of data collected. In 1991 the fatality rate was 14.93 fatalities per one hundred million vehicle miles traveled. According to the Massachusetts Highway Department, the statewide average fatality rate in 1988, the most recent year available, was 2.36. A detailed review of this segment also indicates that the majority of the accidents reported involved a single vehicle.

Intersections along the JLT corridor were also examined to identify accident occurrence over the historic three year period. No significant findings were uncovered to determine that serious traffic conflict problems exist. There were, however, a number of intersections that experienced more accidents than were typically experienced along the corridor. These include: Route 23 and Main Street in Russell; Route 8 in Becket; and Route 102, the Turnpike Exit, and High Street in Lee. Most accident types at these intersections are rear end and angle type collisions.

Bridge Management

All bridges throughout the state undergo routine structural inspection. The Massachusetts Highway Department (MHD) surveys and rates the bridges according to a rating system developed by AASHTO. The AASHTO rating system assigns a numerical value to each bridge ranging from 0 to 100 with 100 being a perfect score. Bridges rated at 50 or above are considered to be structurally non-deficient. Other findings can determine bridges to be functionally obsolete and structurally deficient. A functionally obsolete finding indicates that the structural rating is acceptable (above 49) and that the deck geometry, local capacity, clearance or alignment of the approach roadway no longer meets the criteria for the type of highway the bridge serves. A bridge rating of structurally deficient means that the structural scores are below acceptable sufficiency rating of 50. Sufficiency rating depends on the structural, safety and serviceability of a bridge.

[1]Source: *Statewide Accident Rates* (1988), Massachusetts Highway Department - Traffic Operations.

Table 3

ACCIDENT HISTORY

Jacob's Ladder Trail Scenic Byway Project

Location	Year	Number of Accidents	Type		Severity		Accident Rate *
Russell	89	22	Angle	16	PD	34	162
	90	20	Rear end	7	PI	20	148
	91	15	Head on	4	F	3	112
			Pedestrian	1			
			Fixed object	17			
			Other	11			
			Overturned	1			
Huntington	89	4	Angle	5	PD	5	137
	90	2	Rear end	2	PI	5	69
	91	4	Head on	0	F	0	139
			Pedestrian	0			
			Fixed object	2			
			Other	1			
			Overturned	0			
Chester	89	8	Angle	3	PD	15	90
	90	7	Rear end	1	PI	12	79
	91	12	Head on	1	F	0	137
			Pedestrian	0			
			Fixed object	10			
			Other	11			
			Overturned	1			
Becket	89	18	Angle	10	PD	31	333
	90	16	Rear end	2	PI	12	298
	91	10	Head on	1	F	1	188
			Pedestrian	0			
			Fixed object	19			
			Other	11			
			Overturned	1			
Lee	89	24	Angle	21	PD	40	231
	90	18	Rear end	11	PI	23	174
	91	22	Head on	6	F	1	215
			Pedestrian	2			
			Fixed object	10			
			Other	12			
			Overturned	2			

* Accident Rate per 100 Million Vehicle Miles.

PD = Property Damage, PI = Personal Injury; F = Fatality

Source: Massachusetts Highway Department - Traffic Accident Report 01/01/89 through 12/31/91.

Table 4 lists the bridge structure inventory for the 12 bridges located along the JLT corridor. The table shows that 6 of the bridges are non-deficient. Of the remaining 6 bridges, 5 are rated as functionally obsolete and one is deemed to be structurally deficient. Functionally deficient bridges are considered to be tolerable as long as condition rating is acceptable. If and when the condition rating deteriorates to unacceptable conditions, improvement to the bridge geometry and capacity will be considered as part of an improvement project.

The only structurally deficient structure along the JLT corridor is bridge C11029 over the Sanderson Brook. The AASHTO rating for the bridge is calculated to be 30.5. Other bridges that approach this threshold include R13014, B03008, B03011 and L5024.

Table 4

BRIDGE STRUCTURE INVENTORY

Jacob's Ladder Trail Scenic Byway Project

Location	Bridge Number	Year Built	Under	Condition Ratings			AASHTO Rating	Status
				Deck	Superstructure	Substructure		
Russell	R13014	1924	Black Brook	Satisfactory	Satisfactory	Poor	61.2	Functional Obsolete
	R13017	1959	Potash Brook	Not Applicable	Good	Not Applicable	97.6	Non-Deficient
Chester	C11028	1924	Walker Brook	Satisfactory	Satisfactory	Good	95.7	Non-Deficient
	C11029	1911	Sanderson Brook	Good	Good	Satisfactory	30.5	Structural Deficient
	C11035	1929	B & M RR.	Not Applicable	Fair	Satisfactory	79.8	Functional Obsolete
	C11036	1930	Gold Mine Brook	Good	Good	Good	96.2	Non-Deficient
Becket	B03008	1914	Walker Brook	Good	Satisfactory	Good	50.0	Functional Obsolete
	B03010	1914	Walker Brook	Good	Fair	Satisfactory	82.7	Non-Deficient
	B03011	1906	Walker Brook	Good	Fair	Satisfactory	63.9	Functional Obsolete
	B03043	1906	Walker Brook	Satisfactory	Good	Satisfactory	92.2	Non-Deficient
Lee	L5024	1939	Greenwater Brook	Fair	Fair	Satisfactory	63.5	Functional Obsolete
	L5027	1956	Greenwater Brook	Not Applicable	Not Applicable	Not Applicable	89.4	Non-Deficient

Source: Massachusetts Highway Department Bridge Listing, 1993 bridge.xls

Bicycle Route Feasibility

A Bikeway is any road, path or way designated as being open to bicycle travel. Bicycle use is permitted on all roadways in the Pioneer Valley Region except on express or limited access highways. A Bicycle Route is a segment of a system of bikeways designated by the jurisdiction having authority with appropriate directional and informational markers. The JLT corridor is considered as an eligible bikeway facility, however, has not been designated as an official Bicycle Route by MHD, the authorized agency for this portion of Route 20. Designation is considered advantageous since it requires motorist notification of the bicycle presence and may attract bicycle use to the corridor.

To determine the feasibility of a designated bicycle route along the JLT study area, it was first necessary to determine the type of bicyclist that would be using this facility and the purpose of their trip. Bicyclists can be classified into three distinct types: Group A - Advance Bicyclists, individuals that are considered experienced riders who can operate under most traffic/terrain conditions; Group B - Basic Bicyclists; and Group C - Children, who typically do not have enough ability to operate in traffic without special provisions for bicycles[2]. Trip purpose is generally defined as commuting or recreational.

The various factors used to determine the type of bicyclist the facility is appropriate for include: grade, lateral obstructions, traffic vehicle mix, vehicle speed and volume, roadway geometry and the results of the actual bicycle ride along the JLT corridor. General evaluation of these factors clearly indicate that the type of bicyclist using the JLT corridor would be Group A or experienced riders. This decision is partly based on the changes in elevation and limited roadway space available along the JLT corridor. Therefore, the bicycle route feasibility of this facility was determined for Group A bicyclists making recreational trips.

As well as determining user type, trip purpose is also essential in testing bicycle route designation feasibility. Trip purpose relates principally to the beginning and ending points of the designated route. If commuting trips are anticipated to be the primary trip type, then the designated route should connect to areas of residence and employment. The density of residential and employment land uses along the JLT corridor provide the basis to assume that the users of a designated bicycle facility would be making recreational trips rather than commuting trips. Recreational trip usage does not require a specific connection to land use, however, compatible recreational and amenable conditions are most suitable.

Feasibility of a designated bicycle route along the JLT corridor is measured as a function of lane and shoulder width, travel speed, Average Daily Traffic (ADT), and on street parking. The Federal Highway Administration's (FHWA) report: *Selecting Roadway Design Treatments To Accommodate Bicycles*, roadway design recommendations for "Group A Bicyclists, Rural Section" was used to identify the appropriate roadway geometry to accommodate bicycling in the JLT corridor. Table 5 list these desirable road conditions that accommodate bicycle travel in rural sections.

The American Association of State Highway and Transportation Officials (AASHTO) recommends shoulder widths to be a minimum of four feet to accommodate bicycle travel. "Additional width is desirable if vehicle speeds exceed 35 MPH, if percentages of heavy vehicles is high, or if there are static structures existing on the right side."[3] AASHTO also states that a right lane wider than 12 feet can accommodate both bicyclists and motor vehicles. However, a travel lane width of 14 feet is desirable allowing motorists to pass bicyclists without changing lanes.

---

[2] Source: *Selecting Roadway Design Treatments to Accommodate Bicycles*, Bicycle Federation of America, Center for Applied Research, Inc., November 10, 1992

[3] Source: *Guide for the Development of Bicycle Facilities* (August 1991), American Association of State Highway and Transportation Officials.

Table 5

DESIRABLE ROAD CONDITIONS

Group A Bicyclists In A Rural Section

Jacob's Ladder Trail Scenic Byways Project

Average Motor Vehicle Operating Speed	AADT Less Than 2000		AADT Range 2,000 to 10,000	
	Adequate Sight Distance	Inadequate Sight Distance	Adequate Sight Distance	Inadequate Sight Distance
Less than 30 MPH	12' SL	14' WC	12' SL	14' WC
30 - 40 MPH	14' WC	4' SH	14' WC	4' SH
41 - 50 MPH	4' SH	4' SH	6' SH	6' SH
Over 50 MPH	4' SH	4' SH	6' SH	6' SH

Notes: Adapted from Draft "Selecting Roadway Design Treatments To Accommodate Bicycles", FHWA 1992
Does not apply to roads with high percentages of heavy vehicles.
SL = Shared Lane; SH = Shoulder; WC = Wide Curb Lane.

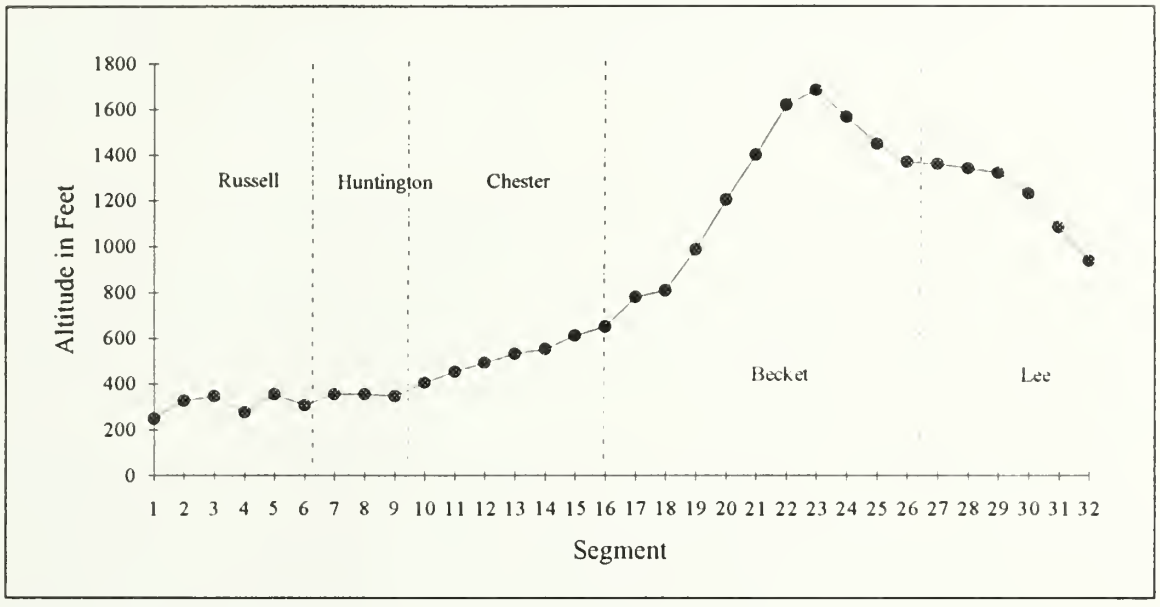
In addition to roadway geometric and travel conditions, physical characteristics such as type of terrain is also used in determining a corridor's feasibility for bicycle designation. The JLT corridor profile can be classified in three different terrain categories: level, rolling and mountainous. Level terrain is defined as segments with several non-continuous sections of roadway with grades of up to 2%. Rolling terrain refers to segments with several non-continuous sections of roadway with grades of up to 3%. Mountainous terrains have continuous sections of roadway with grades greater than 3% and significantly impede travel conditions.

Figure 4 presents the JLT corridor vertical alignment for each roadway segment. The Huntington segment is clearly the only level terrain segment. The Russell and Chester segments can be considered to have rolling terrains while the Becket and Lee segments are almost entirely mountainous. The corridor reaches peak elevation at the Summit House in Becket with an elevation of 1,772 ft.

The comparison of AASHTO guidelines, FHWA guidelines and JLT corridor conditions suggest that bicycle route designation is feasible through Russell, Huntington, and a portion of Chester. Acceptable bicycle route conditions begin at the Westfield - Russell municipal line and continue to the intersection of Route 20 and Sanderson Brook Road at the Chester Blandford State Forest Park in Chester. Service would be accommodated by utilizing a combination of the right travel lane and available shoulder space. The remaining portion of the study area was determined to be inappropriate for designation as a bicycle route. Reasons for this include, the terrain becoming mountainous, vehicle travel speeds increasing, and the location of lateral obstruction (retaining walls, embankments, etc.) along the right hand side of the road. These factors require additional roadway surface for bicyclists to safely navigate than what is currently available. Expanding the shoulder width along this portion of the JLT corridor to accommodate the recommended surface space for bicycle use is not feasible in many areas due to the adjacent physical characteristics of the road.

Figure 4

ROADWAY VERTICAL ALIGNMENT BY SEGMENT
Jacob's Ladder Trail Scenic Byway Project



Source: US Geogologic Survey Maps

RECOMMENDATIONS

The primary objective of a Scenic Byway Program is to redevelop and maintain a highway and its surrounding area that is of significant scenic interest. The series of reports conducted for the Jacob's Ladder Trail Interim Scenic Byway Project focus on this objective through review of the present conditions of facilities that service or provide amenities to the users of the corridor. By identifying deficiencies and enhancement supplements to the corridor, a series of recommendations can be made that focus on increasing public attractiveness and usage of the Jacob Ladder Trail Scenic Byway.

Infrastructure improvements and enhancements are implemented through the planning process and begins with the Regional Transportation Plan (RTP). The RTP presents an outline of the significant improvement activities in both the short and long terms. Projects are evaluated to determine conformance with statewide and regional policy as well as with air quality standards. From the RTP improvement activities are scheduled for implementation and funding through the Transportation Improvement Program (TIP). Projects are arranged by priority annually for the TIP in response to statewide and regional needs under the fiscal constraints of available funding.

Significant infrastructure improvement recommendations identified in the Jacob's Ladder Trail Scenic Byway reports are expected to proceed through the planning process outlined above. Recommendations provided in this report may serve as an improvement plan to address the corridors deficiencies and enhance the areas of scenic attractiveness. The necessary prerequisites to implementation of these recommendations, such as property acquisition or design activities, will be addressed in subsequent phases of the scenic byway program.

Pavement Improvements

As determined using pavement management analysis, a majority of the JLT corridor segments presently require some level of improvement. Good pavement management practices suggest addressing the needs of the system as whole rather than as individual projects with the prime objective of improving and maintaining the overall pavement condition rating. This is most effectively achieved by following an implementation schedule that reaps the greatest amount of benefit for the least amount of expenditure.

The priority of segment improvement is determined based on the calculated Benefit Value (BV). BV is a function of the vehicle volume, roadway length, estimated life of repair, improvement cost, and PCI. The product of the BV formula is a measurement of the benefit/cost ratio for each segment improvement recommendation. Table 6 summarizes the improvement activity priority listing of JLT corridor roadway segments in terms of benefit value. Improvement activity to the JLT corridor infrastructure should use this priority listing as guide for the application of improvement funds.

Design activity for any roadway improvement may be better facilitated if conducted at sub-segment lengths (1/10 mile increments). This will allow for a more defined assessment of the segment's improvement needs. Also, improvement activities should include cost effective measures for preserving the infrastructure such as crack sealing and routine maintenance to drainage facilities.

Table 6

BENEFIT VALUE LISTING OF ROADWAY SEGMENTS IN DESCENDING ORDER

Jacob's Ladder Trail Scenic Byway Project

Street Name	Section ID	Length (ft.)	PCI	Repair Type	Cost ($)	Benefit Value
Route 20 (Becket)	17	5280	85	4	13,963	325
Route 20 (Becket)	23	5280	90	4	19,947	215
Route 20 (Lee)	28	5280	60	2	154,000	156
Route 20 (Lee/Becket)	27	5280	61	2	154,000	154
Route 20 (Huntington)	10	5280	63	2	154,000	149
Route 20 (Chester)	16	5280	64	2	154,000	147
Route 20 (Lee)	31	5280	72	3	46,816	143
Route 20 (Lee)	30	5280	75	3	46,816	137
Route 20 (Huntington)	8	5280	74	3	50,166	130
Route 20 (Chester)	12	5280	74	3	50,166	130
Route 20 (Chester)	13	5280	74	3	50,160	130
Route 20 (Russ/Hntgtn)	7	5280	75	3	50,160	128
Route 20 (Chester)	15	5280	76	3	50,160	126
Route 20 (Chester)	14	5280	77	3	50,160	125
Route 20(Chester)	11	5280	78	3	50,160	123
Route 20 (Becket)	25	5280	78	3	50,160	123
Route 20 (Russell)	4	5280	75	3	53,504	120
Route 20 (Russell)	6	5280	80	3	50,160	120
Route 20 (Lee)	29	5280	80	3	50,160	120
Route 20 (Russell)	5	5280	83	3	50,160	116
Route 20 (Russell)	2	5280	76	3	66,880	95
Route 20 (Russell)	1	5280	77	3	66,880	94
Route 20 (Russell)	3a	3168	77	3	40,128	94
Route 20 (Russell)	3b	2112	78	3	26,752	92
Route 20 (Becket)	26	5280	54	1	440,000	81
Route 20 (Huntington)	9	5280	53	1	469,333	77
Route 20 (Becket)	18	5280	99	5	0	0
Route 20 (Becket)	19	5280	99	5	0	0
Route 20 (Becket)	20	5280	95	5	0	0
Route 20 (Becket)	21	5280	95	5	0	0
Route 20 (Becket)	22	5280	95	5	0	0
Route 20 (Becket)	24	5280	95	5	0	0

pavemgt xlw

Guardrail and Retention Wall Improvements

It is recommended that all roadway improvement projects requiring reconstruction or rehabilitation include the evaluation and appropriate replacement of guardrail structures. Where replacement is warranted, it is recommended that the new equipment be selected on the basis of aesthetics as well as safety. An example of such guardrails include steel backed timber guardrails which are ideal for scenic byway applications. The steel backed timber guardrail takes advantage of the attractive qualities of wood and functions much like any post and beam guardrail system in obstructing vehicles from unsafe areas.

Several retaining wall structures along the JLT corridor were identified as being visually deteriorated. The structural sufficiency of these facilities is undetermined and should be examined. The segments in which these deteriorated retaining walls are located are listed below.

Russell:	segment 7	mile marker 43.9
Huntington:	segment 8	mile marker 43.1
Chester:	segment 15	mile marker 34.0

Deteriorating retaining wall structures should be replaced with structures of amenable texture and color to blend in with the surrounding landscape (rock faced, fresh-cut or natural split-face finish). This type of retaining wall system will enhance and compliment the scenic roadway.

Safety Improvements

The accident history of the study area indicates that the Becket segment and the Lee segment continuously have annual accident rates higher than the statewide average for rural minor arterials. Also, the fatality rate for the Russell segment is higher than the statewide average for that type of road and higher than the average fatality rate on all roadways in the United States for 1990.[4] Approximately 31 percent of these accidents involved a single vehicle. The large number of single vehicle accidents may presumably be related to physical characteristics of the roadway or unsafe operating practices rather than vehicular conflicts. Improvement measures that may circumvent the high accident occurrence include the enhancement of pavement markings, signage, and roadside lighting.

It is recommended that roadway improvements include the installation of high visibility reflectorized pavement striping and signage. These safety improvements should be routinely included in roadway improvement designs and also considered as stand alone improvements for segments with acceptable roadway conditions. The target areas should include areas of severe horizontal and vertical curves as well as high accident or fatality occurrence. For areas where utilities are available, roadside lighting should be considered.

Bridge Improvements

The structural evaluation of the region's bridges obtained from the MHD Bridge Listing indicates that bridge number C11029 over the Sanderson Brook in the town of Chester has been rated structurally deficient. This bridge fails to meet the minimum structural criteria and requires priority for replacement. Four other bridges along the JLT corridor approach structural deficiency and may soon require attention.

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[4]Source: *Summary Report on Aesthetic Bridge Rails and Guardrails* (June 1992), Federal Highway Administration.

To date none of the bridges along the JLT corridor has been scheduled for improvement. Once these bridges are scheduled, it is recommended that the MHD policy for bridge widths on arterial highway be followed and at least one sidewalk to service pedestrian and bicycling activity be provided. Also, to enhance bridge aesthetics, it is recommended that any new construction or bridge improvement along the JLT corridor include bridge railings that are scenically conscientious. A number of bridge railings have been developed for scenic roads including: glue-laminated wood bridge railing; Federal Lands Modified Kansas corral bridge railing; and stone masonry bridge railing.

Bicycle Route Designation

The roadway design along the JLT corridor provides for recreational use appropriate only to the most advanced bicyclists due to limited shoulder widths and extreme changes in elevation. Bicycle route designation is determined to be feasible along the portion of the JLT corridor between the Westfield - Russell line and the Chester - Blandford State Forest Park in Chester. These points provide convenient and attractive areas for bicyclist and motorist parking. The remainder of the corridor is available for bicycle usage, however, is not suitable for designation.

Bicycle route identification signs in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) should be placed along the designated bicycle route. The appropriate signage will inform travelers of the roadway's multiple use. Additional bicycle crossing and bicycle route signs should be posted on major approach streets to Route 20 to inform motorist of approaching riders. In addition to signs, parallel drainage grates should be reoriented or replaced with bicycle safe grates.

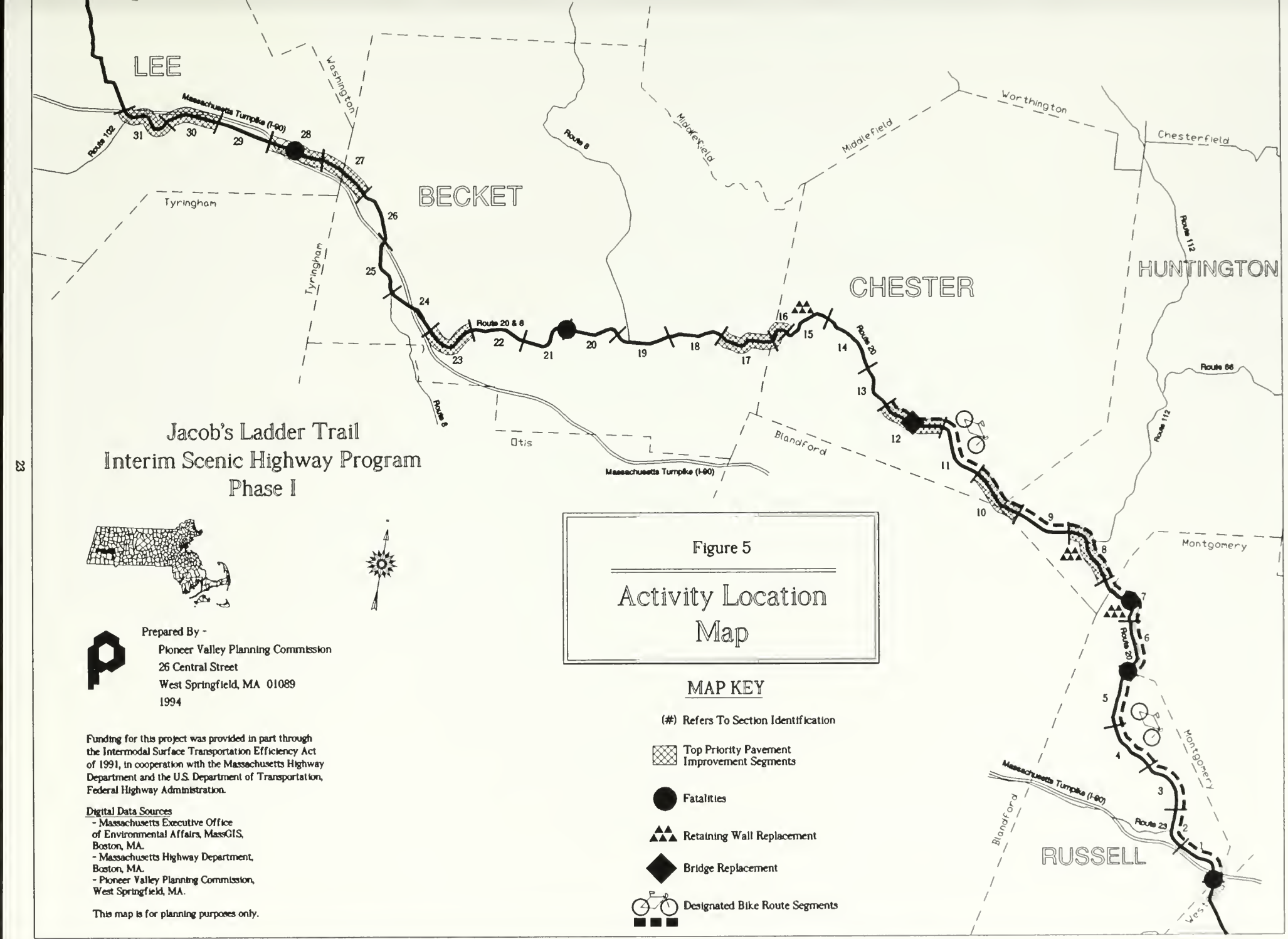
Special provisions could also be made to encourage the attraction of bicyclist Groups B and C to the JLT Scenic Byway area. The designation of bicycle routes on appropriately selected roads off the JLT corridor that provide access to areas of scenic beauty or historic significance would most likely generate this attraction.

Capacity Improvements

Throughout the five segments in the study area, shoulders were found to be narrow, on average the usable shoulder width is two feet. The recommended design shoulder width standard is six feet for rural minor arterials. However, the Massachusetts Highway Design Manual allows for flexibility where appropriate, such as along corridors with surrounding physical characteristics economically incompatible with roadway expansion. The JLT corridor is one example of such flexibility.

Based on the vehicle measurements collected along the JLT corridor, no capacity deficiencies have been identified on segments in the Pioneer Valley Region. Intersection and section serviceability appear to provide adequate operating capacity and do not warrant specific action.

The Berkshire County Regional Planning Commission has identified the need for improved access to the Massachusetts Turnpike in Lee. Several improvement alternatives exist in conceptual form, yet no final commitment has been made by MHD or the Turnpike Authority. It can be assumed that improvement to any unacceptable conditions associated with turnpike access will include major investment activity and will undergo planning via the Regional Transportation Plan and Transportation Improvement Plan for Berkshire County.



Jacob's Ladder Trail
Interim Scenic Highway Program
Phase I

Figure 5

Activity Location Map

Prepared By -
Pioneer Valley Planning Commission
26 Central Street
West Springfield, MA 01089
1994

Funding for this project was provided in part through the Intermodal Surface Transportation Efficiency Act of 1991, in cooperation with the Massachusetts Highway Department and the U.S. Department of Transportation, Federal Highway Administration.

Digital Data Sources
- Massachusetts Executive Office of Environmental Affairs, MassGIS, Boston, MA.
- Massachusetts Highway Department, Boston, MA.
- Pioneer Valley Planning Commission, West Springfield, MA.

This map is for planning purposes only.

MAP KEY

(#) Refers To Section Identification

Top Priority Pavement Improvement Segments

Fatalities

Retaining Wall Replacement

Bridge Replacement

Designated Bike Route Segments

APPENDIX A:

ROADWAY CHARACTERISTICS BY MILE

Scenic Byway Project

Bike/Van Ride Check List

- **1.0** Zone Division #
  - 1.1 Number of Lanes
  - 1.2 Width
  - 1.3 Divided Areas (Type, Condition)
  - 1.4 Pavement Markings (Type, Condition)
  - 1.5 Shoulders- widths
  - 1.6 Sidewalks- condition
  - 1.7 Signage
  - 1.8 Curbing (Type, Condition)
  - 1.9 Guardrails(Start/Finish, Type, Condition)
  - 1.10 Enbankments
  - 1.11 Major Intersections- geometry
  - 1.12 Other

- **2.0** Safety Management
  - 2.1 Intersections
  - 2.2 Sight Distance
  - 2.3 Adjacent Obstructions (Type, Condition)

- **3.0** Bridges
  - 3.1 Name
  - 3.2 Location
  - 3.3 Type
  - 3.4 Geometry
  - 3.5 Width
  - 3.6 Tonage Limit

- **4.0** Amenity Location Areas
  - 4.1 Identify

  Rate
  - 4.2 Size of Area
  - 4.3 Parcel Availability
  - 4.4 Location
  - 4.5 Access
  - 4.6 Area Attractiveness
  - 4.7 Utilities
  - 4.8 Poor Landscaping Area
  - 4.9 Scenic Attractiveness Area

Scenic Byway Project

DATA COLLECTION SHEET

1.0 Zone Division # 1 - Mile Marker 49.04

1.1	Two way road - one lane each side		
1.2	14.5' / 13'		
1.3	No		
1.4	Glass painted center line / shoulders need repainting		
1.5	9' / 7.5'		
1.6	No		
1.7	No passing zone (Do not pass)	Falling rock - 1.0	
	Left hand curve - 0.1	Do not pass - 1.0	
	Right hand curve - 0.4		
	Strathmore Mills - 0.8		
1.8	Right hand side asphalt (pull off)		
1.9	Right hand side steel, good condition		
1.10			
1.11	Strathmore entrance		
1.12	Speed - 50MPH		

2.0 Safety Management

2.1	
2.2	
2.3	

3.0 Bridges

3.1	
3.2	
3.3	
3.4	
3.5	
3.6	

4.0 Amenity Location Areas

4.1	Pull off area
4.2	Very small
4.3	Restricted by river enbankment
4.4	Underneath Mass. Tpk.
4.5	Good access
4.6	
4.7	Electric / Phone
4.8	Natural throughout mile
4.9	Natural throughout mile

Scenic Byway Project

DATA COLLECTION SHEET

1.0 Zone Division # 2 - Mile Marker 48.04

1.1	Two way road - one lane each side		
1.2	13.8' / 13.7'		
1.3	No		
1.4	Glass painted center line		
1.5	8.5' / 8.6'		
1.6	No sidewalks		
1.7	Right hand curve	No passing zone - 1.4	
	Falling rock - 1.1	No passing zone - 1.8	
	Left lane - 1.2	Speed limit 55MPH - 1.85	
	Rt. 20 - 1.25	Left hand curve - 1.85	
1.8	Right hand side asphalt, OK		
1.9	Right hand side, steel on wooden posts		
1.10	At mile 2		
1.11	Mill driveways - 1.7 (intersection)		
1.12	Steep ledge begining intersection of Rt. 23, end at 1.86		

2.0 Safety Management

2.1	
2.2	
2.3	

3.0 Bridges

3.1	
3.2	
3.3	
3.4	
3.6	
3.6	

4.0 Amenity Location Areas

4.1	Pull off area
4.2	
4.3	Restricted by river enbankment
4.4	Beginning (2)
4.5	Limited
4.6	
4.7	
4.8	Natural
4.9	

DATA COLLECTION SHEET

1.0 Zone Division # 3 - Mile Marker 47.04

1.1	Two way road - one lane each side		
1.2	11.5' / 12.5'		
1.3			
1.4	Painted glass bead, good condition, solid yellow		
1.5	10.5' / 9.5'		
1.6	No sidewalks		
1.7	Right hand curve - 2.4		
	No parking - 2.8		
	Slow traffic right lane - 2.95		
1.8	Asphalt		
1.9	Right hand side, steel on wooden posts, good condition - 2.5 south		
1.10	Yes		
1.11			
1.12	Steel retaining - 2.1 south, 2.3 - 2.4 / rock ledge - 2.5		

2.0 Safety Management

2.1	
2.2	
2.3	

3.0 Bridges

3.1	
3.2	
3.3	
3.4	
3.5	
3.6	

4.0 Amenity Location Areas

4.1	Open parcel - 2.7 to fishing spot
4.2	0.1 mile
4.3	Accros from golf course
4.4	No
4.5	
4.6	
4.7	Yes
4.8	Natural
4.9	

Scenic Byway Project

DATA COLLECTION SHEET

1.0 Zone Division # 4

1.1	Two way road - one lane each side / three / two - 3.3		
1.2	11.1' / 12.6'		
1.3	No		
1.4	Painted glass bead, worn		
1.5	10' / tapers down, shoulder ends on right hand side		
1.6	No sidewalks		
1.7		School bus - 3.5	Intersection - 3.7
	Right hand curve - 3.15	Intersection - 3.5	Pedestrian crossing - west side of
	Right lane shoulder ends - 3.2	Do not pass - 3.6	Blandfords St. Rd intersection
	Speed limit 40MPH - 3.3	Speed limit 35MPH - 3.6	No parking - west side West Main/Main St.
	Pedestrian crossing - 3.45	School bus stop - 3.7	Ped. crossing - west side West Main/Main St.
1.8	Asphalt - both sides		
1.9	Right hand side, steel on wooden posts		
1.10			
1.11			
1.12			

2.0 Safety Management

2.1	Old Westfield Rd. - Blandford State Rd. - Highland St.- Main St./West Main St. (flashing)
2.2	
2.3	

3.0 Bridges

3.1	R1 - 3014, Mile Marker 45.642
3.2	3.7 miles
3.3	Concrete span
3.4	Two - way
3.5	
3.6	

4.0 Amenity Location Areas

4.1	Riverbend Restaurant
4.2	1 acre
4.3	Private property
4.4	Mile 3.3
4.5	Yes
4.6	Ugly
4.7	Yes
4.8	
4.9	

DATA COLLECTION SHEET			
1.0 Zone Division # 5			
1.1	Two way road - one lane each side		
1.2	13.3' / 13.2'		
1.3	No		
1.4	Solid-double yellow center line, shoulders worn		
1.5	2.3' / 2.4'		
1.6	Yes, Right hand side begins at Highland St. and ends at 4.0, Fair condition		
1.7	Speed limit 35MPH - 4.35		
	Do not pass - 4.35		
	Speed limit 40MPH - 4.4		
	Hidden drive - 4.5		
1.8	None / right hand side, asphalt - 4.1		
1.9	No / Begins - 4.7		
1.10	No / Begins - 4.7		
1.11			
1.12			
2.0 Safety Management			
2.1			
2.2			
2.3			
3.0 Bridges			
3.1			
3.2			
3.3			
3.1			
3.6			
3.6			
4.0 Amenity Location Areas			
4.1	Open area		
4.2	Narrow strip		
4.3			
4.4	mm 4.8 to mm 5.0		
4.5			
4.6			
4.7			
4.8			
4.9			

Scenic Byway Project

DATA COLLECTION SHEET			
1.0 Zone Division #	6		
1.1	Two way road - one lane each side		
1.2	12' 8" / 23' 1"		
1.3	No		
1.4	Double yellow, glass bead painted, fair condition		
1.5	2' / 2' 3"		
1.6	No sidewalks		
1.7	Speed limit 45MPH - 5.11	Speed limit 30MPH - 5.65	
	Do not pass - 5.2	Speed limit 30MPH - 5.85	
	Right hand curve - 5.4		
	Multy curves - 5.6		
1.8	No curbing		
1.9	Steel on steel posts		
1.10			
1.11			
1.12	Rock retaining wall - 5.7 to 5.8		
2.0 Safety Management			
2.1			
2.2			
2.3			
3.0 Bridges			
3.1			
3.2			
3.3			
3.4			
3.5			
3.6			
4.0 Amenity Location Areas			
4.1	Open space		
4.2	Small		
4.3	No		
4.4	5		
4.5			
4.6			
4.7			
4.8			
4.9			

DATA COLLECTION SHEET

1.0 Zone Division # 9 - Mile Marker 41.04

1.1	Two way road - one lane each side		
1.2	12' 8" / 12' 5"		
1.3	No		
1.4	Yellow center line is patchy and needs repainting, good shoulder line		
1.5	2' 8" / 2' 5"		
1.6	No sidewalks		
1.7	Speed limit 50 MPH - 8.05		
	Right hand turn - 8.1		
	No parking - 8.4		
	Left hand turn - 8.65		
1.8	No curbing		
1.9	Steel on steel posts		
1.10			
1.11			
1.12			

2.0 Safety Management

2.1	
2.2	
2.3	

3.0 Bridges

3.1	
3.2	
3.3	
3.4	
3.5	
3.6	

4.0 Amenity Location Areas

4.1	Pull offs
4.2	0.1'
4.3	No
4.4	8.1
4.5	Limited
4.6	N/A
4.7	
4.8	
4.9	

Scenic Byway Project

DATA COLLECTION SHEET			
1.0 Zone Division #	10 - Mile Marker 40.04		
1.1	Two way road - one lane each side		
1.2	12' 6" / 11' 9"		
1.3	No		
1.4	Dashed yellow center line, patchy / shoulders in good condition		
1.5	3' / 2' 9"		
1.6	No sidewalks		
1.7	Do not pass - 9.05	Do not pass - 9.75	
	Right hand turn - 9.06		
	Speed limit 50MPH - 9.2		
	Chester - 9.25		
1.8	Np curbing		
1.9	No / guardrails from 9.25 on		
1.10			
1.11			
1.12	Chester State Park - 9.6 to 9.7		
2.0 Safety Management			
2.1			
2.2			
2.3			
3.0 Bridges			
3.1			
3.2			
3.3			
3.4			
3.5			
3.6			
4.0 Amenity Location Areas			
4.1			
4.2			
4.3			
4.4			
4.5			
4.6			
4.7			
4.8			
4.9			

DATA COLLECTION SHEET

1.0 Zone Division # 11 - Chester State Park

1.1	Two way road - one lane each side		
1.2	12' 4" / 12' 9"		
1.3	No		
1.4	Dashed yellow center line, patchy		
1.5	2' 8" / 2' 3"		
1.6	No sidewalks		
1.7	Do not pass - 10.15	Do not pass - 10.75	
	Right hand curve - 10.25	Left hand turn w/intersecting	
	Speed limit 50MPH - 10.4	street - 10.85	
	Entrance to park - 10.75	School bus entering - 10.9	
1.8	No curbing		
1.9	Steel on steel posts		
1.10	Steep enbankment at 10.3		
1.11			
1.12			

2.0 Safety Management

2.1	Old State Road
2.2	
2.3	

3.0 Bridges

3.1	C1 - 1036 (mm 39.160)
3.2	
3.3	
3.4	
3.5	
3.6	

4.0 Amenity Location Areas

4.1	Pull off open
4.2	
4.3	No
4.4	10.15
4.5	
4.6	Railroad tracks
4.7	No
4.8	Natural
4.9	Limited by railroad tracks

Scenic Byway Project

DATA COLLECTION SHEET			
1.0 Zone Division #	12 - Chester State Park		
1.1	Two way road - one lane each side		
1.2	12' 4" / 12' 9"		
1.3	No		
1.4	Dashed yellow center line, patchy		
1.5	2' 8" / 2' 3"		
1.6	No sidewalks		
1.7	School bus entering east bound - 11.1	Multy curves - 11.6	
	Do not pass - 11.4	Multy curves - 11.9	
	Speed limit 45MPH - 11.5		
	Trucks entering right - 11.55		
1.8	No curbing		
1.9			
1.10			
1.11			
1.12			
2.0 Safety Management			
2.1	Sanderson Brook Falls entrance / Bonishe Lumber entrance - 11.6		
2.2			
2.3			
3.0 Bridges			
3.1	C1 - 1029, Mile Marker 37.702		
3.2			
3.3			
3.4			
3.5			
3.6			
4.0 Amenity Location Areas			
4.1			
4.2			
4.3			
4.4			
4.5			
4.6			
4.7			
4.8			
4.9			

DATA COLLECTION SHEET			
1.0 Zone Division # 13			
1.1	Two way road - one lane each side		
1.2	12' 9" / 12' 2"		
1.3	No		
1.4	Double yellow center line, fair / shoulders need painting		
1.5	2' 9" / 3'		
1.6	No sidewalks		
1.7	Speed limit 45MPH - 12.25		
	Left hand curve - 12.4		
	Multi curves - 12.7		
	Speed limit 40MPH - 12.75		
1.8	No curbing		
1.9	Steel on steel posts		
1.10	Yes		
1.11			
1.12			
2.0 Safety Management			
2.1			
2.2			
2.3			
3.0 Bridges			
3.1			
3.2			
3.3			
3.4			
3.5			
3.6			
4.0 Amenity Location Areas			
4.1	Open space / open space		
4.2	small / 0.1'		
4.3	No / Yes		
4.4	12.1 / 12.6		
4.5	Limited / utility pole - between two curves / yes		
4.6	River enbankment / relatively attractiveness		
4.7	No / yes		
4.8	Natural / natural		
4.9	OK / Hills - river access		

DATA COLLECTION SHEET			
1.0 Zone Division # 14			
1.1	Two way road - one lane each side		
1.2	12' 2" / 12' 6"		
1.3	No		
1.4	Yellow center line, patchy / shoulders, fair and patchy		
1.5	2' 7"/ 3' 5"		
1.6	No sidewalks		
1.7	Speed limit 45MPH - 13.05		
	Right hand turn - 13.2		
	Speed limit 40 MPH - 13.61		
	Multi curves - 13.9		
1.8	No curbing / south side - 13.3,granite to asphalt up to bridge		
1.9			
1.10			
1.11			
1.12	Residental section - 13.1 to 13.2 and 13.7 to 14.1		
2.0 Safety Management			
2.1	Bay State Dr. - 13.3 and 13.8		
2.2			
2.3			
3.0 Bridges			
3.1	C1 - 1035, Mile Marker 35.08		
3.2			
3.3			
3.4			
3.5			
3.6			
4.0 Amenity Location Areas			
4.1			
4.2			
4.3			
4.4			
4.5			
4.6			
4.7			
4.8			
4.9			

Scenic Byway Project

DATA COLLECTION SHEET

1.0 Zone Division # 15

1.1	Two way road - one lane each side		
1.2	12' 1" / 12' 9"		
1.3	No		
1.4	Double yellow center line		
1.5	2' 8" / 2' 9"		
1.6	Yes,left side of road / Right side of road - 14.1 to 14.6		
1.7	Speed limit 30MPH - 14.0	Multi curves - 14.45	
	Ped. crossing - 14.05	Speed limit 35MPH - 14.8	
	No parking - 14.2		
	Ped. crossing - 14.3		
1.8	Granite curving in residential area		
1.9	Steel on steel posts after residential area		
1.10			
1.11			
1.12	Riverbed changes to left side - 14.45		

2.0 Safety Management

2.1	Hampden St. / / Middlefield Rd. / William St. - 14.6
2.2	
2.3	

3.0 Bridges

3.1	C1 - 1028
3.2	
3.3	
3.4	
3.5	
3.6	

4.0 Amenity Location Areas

4.1	Pull off area (rest stop)
4.2	1+ acre
4.3	Yes
4.4	Mosaleum grave stone - 14.8
4.5	Access OK
4.6	No significant features
4.7	Yes
4.8	Poor
4.9	Riverbed

DATA COLLECTION SHEET

1.0 Zone Division # 16

1.1	Two way road - one lane each side		
1.2	12' 10" / 12' 7"		
1.3	No		
1.4	Double yellow center line, patchy condition		
1.5	3' 2" / 2' 9" (15.15 to 15.3 the shoulder widens)		
1.6	No sidewalks		
1.7	Right turn - 15.1	Speed limit 40 MPH - 15.65	
	Speed limit 40MPH - 15.15	Right hand curve w/intersecting	
	Falling rock - 15.2	street - 15.65	
	Speed limit 35MPH - 15.6		
1.8	No curbing		
1.9	Steel on steel posts		
1.10	10' embankments		
1.11			
1.12	severely deteriorating concrete wall - 15.4		

2.0 Safety Management

2.1	Blandford Rd. - 15.6
2.2	
2.3	

3.0 Bridges

3.1	
3.2	
3.3	
3.1	
3.5	
3.6	

4.0 Amenity Location Areas

4.1	
4.2	
4.3	
4.4	
4.5	
4.6	
4.7	
4.8	
4.9	

Scenic Byway Project

DATA COLLECTION SHEET

1.0 Zone Division # 17 - Becket Berkshire County - Mile Marker 33.7

1.1	Two way road - one lane each side		
1.2	12' 6" / 12' 8"		
1.3	No		
1.4	Double yellow center line, patchy condition / shoulders fading		
1.5	3' 6" / 12' 7"		
1.6	No sidewalks		
1.7	Speed limit 40MPH, (hidden) - 0.1	Left hand turn w/intersecting	Bridge tonnage - 0.5
	Curve ahead - 0.1	street - 0.3	School bus entering - 0.5
	Multi curves - 0.2	Warning curve arrow - 0.3, 0.4	Speed limit 45MPH - 0.65
	Speed limit 30MPH - 0.25	School bus ahead - 0.45	Speed limit 40MPH - 0.95
1.8	Asphalt curbing - 0.6 to 0.65 and 0.7 to 0.95		
1.9	Left hand side steel on steel posts / shifts to Right hand side steel on wood posts - 0.6		
1.10	No embankments		
1.11	No		
1.12	Construction - 0.5 / River crosses to right hand side		

2.0 Safety Management

2.1	Corey Rd.
2.2	
2.3	

3.0 Bridges

3.1	B0 - 3008
3.2	
3.3	
3.4	
3.5	
3.6	17 / 22 / 33

4.0 Amenity Location Areas

4.1	
4.2	
4.3	
4.4	
4.5	
4.6	
4.7	
4.8	
4.9	

DATA COLLECTION SHEET			
1.0 Zone Division #	18		
1.1	Two way road - one lane each side		
1.2	12' 1" / 12' 2"		
1.3	No		
1.4	Double yellow center line painted, fading around curves		
1.5	4' 1" / 3" 5"		
1.6	Sidewalks from 1.1 to 1.35 on one side and 1.65 to 1.8 on both sides		
1.7	Multi curves - 1.05		
	Speed limit 40MPH - 1.35		
	Speed limit 45MPH - 1.5		
	Do not pass - 1.6		
1.8	No curbing		
1.9	Steel on steel posts - 2.0 to 2.05 / Steel on wood posts - 2.05 on		
1.10	No		
1.11			
1.12	Retaining steel wall - 1.35 to 1.41		
2.0 Safety Management			
2.1			
2.2			
2.3			
3.0 Bridges			
3.1	B0 - 3010, shifts back to left hand side / B0 - 3011		
3.2	1.1 to 1.65		
3.3			
3.1			
3.5			
3.6	16 / 19 / 28		
4.0 Amenity Location Areas			
4.1			
4.2			
4.3			
4.4			
4.5			
4.6			
4.7			
4.8			
4.9			

DATA COLLECTION SHEET

1.0 Zone Division # 19

1.1	Two way road, one lane one side vs. two lanes the other side (Rt. 8 intersections)		
1.2	12' 5" / 12' 4"		
1.3	No		
1.4	Double yellow lines (one solid, one dashed) in fair condition, fading		
1.5	2' 9" / 2' 11"		
1.6	No sidewalks		
1.7	Speed limit 50MPH - 2.05	Intersection - 2.6	
	Do not pass - 2.1	Road narrows - 2.75	
	Speed limit 45MPH - 2.4	Right hand curve - 2.8	
	Do not pass - 2.6	Left hand curve - 2.95	
1.8	Steel on wood posts - 2.1 to 2.2		
1.9	Guardrails on both sides of bridge		
1.10			
1.11			
1.12			

2.0 Safety Management

2.1	Rt. 8 - 18.7
2.2	
2.3	

3.0 Bridges

3.1	B0 - 3034 / B0 - 3043 / B0 - 3032
3.2	2.0 / Mile Marker 31.505 / 2.5
3.3	
3.4	
3.5	
3.6	

4.0 Amenity Location Areas

4.1	
4.2	
4.3	
4.4	
4.5	
4.6	
4.7	
4.8	
4.9	

Scenic Byway Project

DATA COLLECTION SHEET

1.0 Zone Division # 20

1.1	Two way road - one side each side		
1.2	12' 7" / 12' 10"		
1.3	No		
1.4	Double yellow center line is fading		
1.5	4' / 2' 10"		
1.6	No sidewalks		
1.7	Speed limit 35MPH - 3.0	Do not pass - 3.7	
	<<< - 3.15	Fire station - 3.8	
	Speed limit 50MPH - 3.25	Intersection - 3.85	
	Right hand curve - 3.3	Speedlimit 45MPH - 3.95	
1.8	No curbing		
1.9	Right hand side steel on wood posts		
1.10	No embankments		
1.11			
1.12			

2.0 Safety Management

2.1	Wells Rd. 3.95
2.2	
2.3	

3.0 Bridges

3.1	
3.2	
3.3	
3.4	
3.5	
3.6	

4.0 Amenity Location Areas

4.1	
4.2	
4.3	
4.4	
4.5	
4.6	
4.7	
4.8	
4.9	

DATA COLLECTION SHEET

1.0 Zone Division # 21

1.1	Two way road - one lane each side		
1.2	12' 8" / 13'		
1.3	No		
1.4	Double yellow center line in good condition / shoulders fading		
1.5	2' / 2' 8"		
1.6	No sidewalks		
1.7	Left hand curve - 4.0	Left hand curve w/intersecting street - 4.9	
	Speed limit 50MPH - 4.7		
	Do not pass - 4.8		
	School bus stop - 4.85		
1.8	No curbing		
1.9	Guardrails on left hand side - 4.1 to 4.3		
1.10	No enbankments		
1.11			
1.12			

2.0 Safety Management

2.1	Driveway - mm 21.2 / Fred Snow dirt rd.
2.2	
2.3	

3.0 Bridges

3.1	
3.2	
3.3	
3.4	
3.5	
3.6	

4.0 Amenity Location Areas

4.1	Rest area
4.2	
4.3	Yes
4.4	4.4
4.5	Yes
4.6	Wooded area
4.7	Yes
4.8	OK
4.9	OK picnic spot

DATA COLLECTION SHEET			
1.0 Zone Division # 22			
1.1	Two way road - one lane each side		
1.2	12' 8" / 12' 10"		
1.3	No		
1.4	Solid double yellow center line in good condition / shoulders fading		
1.5	3' / 2' 5"		
1.6	No sidewalks		
1.7	Rt. 20 west and Rt. 8 south - 5.0	Multi curves - 5.6	
	Do not pass - 5.2	Speed limit 50MPH - 5.8	
	Left hand curve - 5.25	Left hand curve - 5.9	
	Do not pass - 5.55		
1.8	No curbing		
1.9	Guardrails on left hand side - 5.1 to 5.25		
1.10	No enbankments		
1.11			
1.12			
2.0 Safety Management			
2.1			
2.2			
2.3			
3.0 Bridges			
3.1			
3.2			
3.3			
3.4			
3.6			
3.6			
4.0 Amenity Location Areas			
4.1			
4.2			
4.3			
4.4			
4.5			
4.6			
4.7			
4.8			
4.9			

Scenic Byway Project

DATA COLLECTION SHEET

1.0 Zone Division # 23

1.1	Two way road - one lane each side		
1.2	12' 4" / 12' 9"		
1.3	No		
1.4	Constant since Becket; lightly faded / Glass bed worn		
1.5	2' 4" / 2' 2"		
1.6	No sidewalks		
1.7	Do not pass - 6.2	Rt. 8 and Rt. 20 - 6.85	
	Speed limit 40MPH - 6.35		
	Right hand turn - 6.4		
	Speed limit 50MPH - 6.8		
1.8	No curbing		
1.9	Guardrails on both sides - 6.5 to 6.6		
1.10			
1.11			
1.12			

2.0 Safety Management

2.1	Woden Rd. - 6.7 / George Carter - 6.8
2.2	
2.3	

3.0 Bridges

3.1	
3.2	
3.3	
3.4	
3.5	
3.6	

4.0 Amenity Location Areas

4.1	
4.2	
4.3	
4.4	
4.5	
4.6	
4.7	
4.8	
4.9	

Scenic Byway Project

DATA COLLECTION SHEET			
1.0 Zone Division #	24		
1.1	Two way road - one lane each side		
1.2	12' 11" / 12' 8"		
1.3	No		
1.4	Dashed center line relatively new / shoulders fading		
1.5	2' 4" / 2' 5"		
1.6	No sidewalks		
1.7	Do not pass - 7.0	Speed limit 45MPH - 7.7	
	Clearance - 7.15	Rt. 8 and Rt. 20 - 7.8	
	School bus stop - 7.3		
	Do not pass - 7.64		
1.8			
1.9			
1.10			
1.11			
1.12	Two structure overpass - 26.16		
2.0 Safety Management			
2.1	A road - 7.1 / Route 8 - 7.8 / Route 20 - 8.0		
2.2			
2.3			
3.0 Bridges			
3.1			
3.2			
3.3			
3.4			
3.6			
3.6			
4.0 Amenity Location Areas			
4.1			
4.2			
4.3			
4.4			
4.5			
4.6			
4.7			
4.8			
4.9			

Scenic Byway Project

DATA COLLECTION SHEET

1.0 Zone Division # 25 - Merger of Rt. 8 with Rt. 20 on the left

1.1	Two way road - one lane each side		
1.2	12' 9" / 18' 4"		
1.3	No		
1.4	Double yellow center line, new / shoulders faded		
1.5	3' 7" / 2' 11"		
1.6	No sidewalks		
1.7	Rt. 20 west and I-90 - 8.0	Speed limit 50MPH - 8.7	
	Left hand curve - 8.1	Do not pass - 8.75	
	Speed limit 45MPH - 8.15	Multi curves - 8.8	
	Right hand curve - 8.3	Mass Pike - 8.9	
1.8	No curbing		
1.9	Guardrails on right hand side - 8.3		
1.10	No enbankments		
1.11			
1.12	Dangerous merge from left		

2.0 Safety Management

2.1	
2.2	
2.3	

3.0 Bridges

3.1	
3.2	
3.3	
3.4	
3.5	
3.6	

4.0 Amenity Location Areas

4.1	Pull off
4.2	Relatively small
4.3	No
4.4	8.55 - 8.65
4.5	Limited
4.6	None
4.7	
4.8	
4.9	

Scenic Byway Project

DATA COLLECTION SHEET			
1.0 Zone Division #	26		
1.1	Two way road - one lane each side		
1.2	12' 2" / 12' 10"		
1.3	No		
1.4	Yellow center line is faded / shoulders are faded		
1.5	2' 6" / 2' 6"		
1.6	No sidewalks		
1.7	Ped. crossing - 9.25	Speed limit 50MPH - 9.9	
	Left hand curve - 9.3		
	Do not pass - 9.55		
	Speed limit 40MPH - 9.6		
1.8	No curbing		
1.9	Guardrails - 9.4 to 9.7 and 9.8 to 10.2		
1.10			
1.11			
1.12			
2.0 Safety Management			
2.1			
2.2			
2.3			
3.0 Bridges			
3.1			
3.2			
3.3			
3.4			
3.5			
3.6			
4.0 Amenity Location Areas			
4.1	Very beautiful around lake		
4.2			
4.3			
4.4			
4.5			
4.6			
4.7			
4.8			
4.9			

DATA COLLECTION SHEET

1.0 Zone Division # 27

1.1	Two way road - one land each side		
1.2	12'5" / 12' 5"		
1.3	No		
1.4	New double yellow center line and shoulders		
1.5	3' 4" / 2' 4"		
1.6	No sidewalks		
1.7	Multi curves - 10.05	School stop - 10.55	Left hand curve - 10.85
	Ped. crossing - 10.2	Speed limit 50MPH - 10.6	
	Boston ahead - 10.35	Intersection - 10.7	
	Do not pass - 10.45	Rt. 20 - 10.75	
1.8	No curbing		
1.9	Guardrails - 10.0 to 10.05		
1.10			
1.11			
1.12			

2.0 Safety Management

2.1	Becket Rd. - 10.8
2.2	
2.3	

3.0 Bridges

3.1	
3.2	
3.3	
3.4	
3.5	
3.6	

4.0 Amenity Location Areas

4.1	
4.2	
4.3	
4.4	
4.5	
4.6	
4.7	
4.8	
4.9	

Scenic Byway Project

DATA COLLECTION SHEET			
1.0 Zone Division #	28		
1.1	Two way road - one lane each side		
1.2	12' 5" / 12' 9"		
1.3	No		
1.4	Yellow center line OK / shoulders fading		
1.5	2' 10" / 2' 4"		
1.6	No sidewalks		
1.7	Speed limit 45MPH - 11.05	Speed limit 50MPH - 11.5	
	Left hand curve - 11.1	Do not pass - 11.65	
	School bus stop - 11.3	Speed limit 45MPH - 11.95	
	Trucks entering left - 11.4		
1.8	Curbing on both sides of overpass		
1.9			
1.10			
1.11			
1.12			
2.0 Safety Management			
2.1			
2.2			
2.3			
3.0 Bridges			
3.1	I-90 overpass with wide shoulders - 11.8		
3.2			
3.3			
3.4			
3.5			
3.6			
4.0 Amenity Location Areas			
4.1			
4.2			
4.3			
4.4			
4.5			
4.6			
4.7			
4.8			
4.9			

Scenic Byway Project

DATA COLLECTION SHEET

1.0 Zone Division # 29

1.1	Two way road - one lane each side		
1.2	12' 9" / 12' 2"		
1.3	No		
1.4	Yellow center line in good condition / shoulders in good condition		
1.5	3' 3" / 3' 7" / 1' or less - 12.2 / No shoulder markings - 12.7		
1.6	No sidewalks		
1.7	Do not pass - 12.2		
	Telephone - 12.5		
	Do not pass - 12.75		
	Intersection - 12.9		
1.8	No curbing		
1.9			
1.10			
1.11			
1.12			

2.0 Safety Management

2.1	Vehicles pulling out of tavern / Chestnut St. - 12.8
2.2	
2.3	

3.0 Bridges

3.1	
3.2	
3.3	
3.4	
3.5	
3.6	

4.0 Amenity Location Areas

4.1	
4.2	
4.3	
4.4	
4.5	
4.6	
4.7	
4.8	
4.9	

Scenic Byway Project

DATA COLLECTION SHEET			
1.0 Zone Division #	30		
1.1	Two way road - one lane each side		
1.2	8' 5" / 14' 2"		
1.3	No		
1.4	Dashed yellow center line is new / Solid yellow center line is faded / shoulders OK		
1.5	No shoulders on left hand side		
1.6	Sidewalks on right hand side - 13.9		
1.7	Rt. 20 west - 13.3	Ped. crossing - 13.7	Multi curves - 13.9
	Do not pass - 13.35	Speed limit 30MPH - 13.7	Speed limit 30MPH - 13.9
	Left hand curve - 13.4	Ped. crossing - 13.8	
	Rt. 3 south - 13.55	Do not pass - 13.85	
1.8	No curbing		
1.9	Guardrails on left hand side - 13.3 to 13.9		
1.10			
1.11			
1.12			
2.0 Safety Management			
2.1	Intersection - 13.6		
2.2			
2.3			
3.0 Bridges			
3.1	L - 5 - 24, Mile Marker 20.3		
3.2	13.3		
3.3			
3.4			
3.5			
3.5			
4.0 Amenity Location Areas			
4.1			
4.2			
4.3			
4.4			
4.5			
4.6			
4.7			
4.8			
4.9			

DATA COLLECTION SHEET

1.0 Zone Division # 31

1.1	Two way road - one lane each side		
1.2	12' 5" / 12' 8"		
1.3	No		
1.4			
1.5	3' 9" / 2' 10"		
1.6	Sidewalks width - 5' 11" (unkept)		
1.7	School - 14.0	Ped. crossing - 14.1	
	Right hand turn w/ intersecting	Speed limit 30MPH - 14.6	
	street - 14.1	Ped. crossing - 14.65	
	Speed limit 30MPH - 14.15		
1.8	Curbing on right hand side		
1.9	Guardrails, concrete		
1.10			
1.11			
1.12			

2.0 Safety Management

2.1	
2.2	
2.3	

3.0 Bridges

3.1	
3.2	
3.3	
3.4	
3.5	
3.6	

4.0 Amenity Location Areas

4.1	Pull off
4.2	OK
4.3	
4.4	14.2
4.5	Limited
4.6	None
4.7	
4.8	
4.9	

APPENDIX B:

AVERAGE DAILY TRAFFIC COUNTS

SITE CODE : 00000043
Location : Chester
Location2 : Rte. 20 County Line
Operator : RM,TZ

PIONEER VALLEY PLANNING COMMISSION

PAGE: 1
FILE: 0043

DATE: 5/03/93

TIME BEGIN	MONDAY 3		TUESDAY 4		WEDNESDAY 5		THURSDAY 6		FRIDAY 7		SATURDAY 8		SUNDAY 9		WEEK AVERAGE	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	7	7	9	8	*	*	*	*	*	*	*	*	8	7
1:00	*	*	2	4	1	6	*	*	*	*	*	*	*	*	1	5
2:00	*	*	0	3	1	3	*	*	*	*	*	*	*	*	0	3
3:00	*	*	3	2	3	4	*	*	*	*	*	*	*	*	3	3
4:00	*	*	6	7	10	4	*	*	*	*	*	*	*	*	8	5
5:00	*	*	26	6	20	18	*	*	*	*	*	*	*	*	23	12
6:00	*	*	44	43	46	35	*	*	*	*	*	*	*	*	45	39
7:00	*	*	49	54	50	47	*	*	*	*	*	*	*	*	49	50
8:00	*	*	53	38	37	49	*	*	*	*	*	*	*	*	45	43
9:00	*	*	52	55	50	39	*	*	*	*	*	*	*	*	51	47
10:00	*	*	51	41	*	*	*	*	*	*	*	*	*	*	51	41
11:00	*	*	51	59	*	*	*	*	*	*	*	*	*	*	51	59
12:00 PM	*	*	46	43	*	*	*	*	*	*	*	*	*	*	46	43
1:00	*	*	47	34	*	*	*	*	*	*	*	*	*	*	47	34
2:00	52	44	63	47	*	*	*	*	*	*	*	*	*	*	57	45
3:00	84	67	72	75	*	*	*	*	*	*	*	*	*	*	78	71
4:00	64	73	62	59	*	*	*	*	*	*	*	*	*	*	63	66
5:00	54	58	65	49	*	*	*	*	*	*	*	*	*	*	59	53
6:00	37	34	48	55	*	*	*	*	*	*	*	*	*	*	42	44
7:00	24	31	17	25	*	*	*	*	*	*	*	*	*	*	20	28
8:00	27	28	23	20	*	*	*	*	*	*	*	*	*	*	25	24
9:00	21	19	16	27	*	*	*	*	*	*	*	*	*	*	18	23
10:00	9	16	9	14	*	*	*	*	*	*	*	*	*	*	9	15
11:00	8	10	9	13	*	*	*	*	*	*	*	*	*	*	8	11
TOTALS	380	380	821	780	227	213	*	*	*	*	*	*	*	*	807	771

COMBINED TOTALS

12:00 AM	*	14	17	*	*	*	*	15
1:00	*	6	7	*	*	*	*	6
2:00	*	3	4	*	*	*	*	3
3:00	*	5	7	*	*	*	*	6
4:00	*	13	14	*	*	*	*	13
5:00	*	32	38	*	*	*	*	35
6:00	*	87	81	*	*	*	*	84
7:00	*	103	97	*	*	*	*	99
8:00	*	91	86	*	*	*	*	88
9:00	*	107	89	*	*	*	*	98
10:00	*	92	*	*	*	*	*	92
11:00	*	110	*	*	*	*	*	110
12:00 PM	*	89	*	*	*	*	*	89
1:00	*	81	*	*	*	*	*	81
2:00	96	110	*	*	*	*	*	102
3:00	151	147	*	*	*	*	*	149
4:00	137	121	*	*	*	*	*	129
5:00	112	114	*	*	*	*	*	112
6:00	71	103	*	*	*	*	*	86
7:00	55	42	*	*	*	*	*	48
8:00	55	43	*	*	*	*	*	49
9:00	40	43	*	*	*	*	*	41
10:00	25	23	*	*	*	*	*	24
11:00	18	22	*	*	*	*	*	19
TOTALS	760	1601	440	*	*	*	*	1578

SITE CODE : 00000033
Location : HUNTINGTON, RTE. 20
Location2 : N/O RTE. 112
Operator : TZ,CR

PIONEER VALLEY PLANNING COMMISSION

PAGE: 1
FILE: 000033
DATE: 5/10/93

TIME	MONDAY 10		TUESDAY 11		WEDNESDAY 12		THURSDAY 13		FRIDAY 14		SATURDAY 15		SUNDAY 16		WEEK AVERAGE	
BEGIN	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
12:00 AM	*	*	*	*	*	*	3	20	1	18	*	*	*	*	2	19
1:00	*	*	*	*	*	*	3	5	1	13	*	*	*	*	2	9
2:00	*	*	*	*	*	*	3	7	5	6	*	*	*	*	4	6
3:00	*	*	*	*	*	*	5	5	4	6	*	*	*	*	4	5
4:00	*	*	*	*	*	*	11	6	11	5	*	*	*	*	11	5
5:00	*	*	*	*	*	*	44	5	45	13	*	*	*	*	44	9
6:00	*	*	*	*	*	*	118	54	132	47	*	*	*	*	125	50
7:00	*	*	*	*	*	*	110	59	111	64	*	*	*	*	110	61
8:00	*	*	*	*	*	*	107	51	102	57	*	*	*	*	104	54
9:00	*	*	*	*	*	*	71	55	74	63	*	*	*	*	72	59
10:00	*	*	*	*	*	*	69	74	86	77	*	*	*	*	77	75
11:00	*	*	*	*	*	*	72	72	87	93	*	*	*	*	79	82
12:00 PM	*	*	*	*	*	*	90	67	77	84	*	*	*	*	83	75
1:00	*	*	*	*	*	*	64	61	101	87	*	*	*	*	82	74
2:00	*	*	*	*	*	*	81	99	92	114	*	*	*	*	86	106
3:00	*	*	*	*	*	*	92	126	90	95	*	*	*	*	91	110
4:00	*	*	*	*	*	*	115	122	*	*	*	*	*	*	115	122
5:00	*	*	*	*	*	*	90	111	*	*	*	*	*	*	90	111
6:00	*	*	*	*	56	112	58	102	*	*	*	*	*	*	57	107
7:00	*	*	*	*	77	64	35	80	*	*	*	*	*	*	56	72
8:00	*	*	*	*	36	59	34	72	*	*	*	*	*	*	35	65
9:00	*	*	*	*	30	43	28	31	*	*	*	*	*	*	29	37
10:00	*	*	*	*	29	42	28	35	*	*	*	*	*	*	28	38
11:00	*	*	*	*	17	28	8	26	*	*	*	*	*	*	12	27
TOTALS	*	*	*	*	245	348	1339	1345	1019	842	*	*	*	*	1398	1378

COMBINED TOTALS

12:00 AM	*	*	*	23	19	*	*	21
1:00	*	*	*	8	14	*	*	11
2:00	*	*	*	10	11	*	*	10
3:00	*	*	*	10	10	*	*	9
4:00	*	*	*	17	16	*	*	16
5:00	*	*	*	49	58	*	*	53
6:00	*	*	*	172	179	*	*	175
7:00	*	*	*	169	175	*	*	171
8:00	*	*	*	158	159	*	*	158
9:00	*	*	*	126	137	*	*	131
10:00	*	*	*	143	163	*	*	152
11:00	*	*	*	144	180	*	*	161
12:00 PM	*	*	*	157	161	*	*	158
1:00	*	*	*	125	188	*	*	156
2:00	*	*	*	180	206	*	*	192
3:00	*	*	*	218	185	*	*	201
4:00	*	*	*	237	*	*	*	237
5:00	*	*	*	201	*	*	*	201
6:00	*	*	168	160	*	*	*	164
7:00	*	*	141	115	*	*	*	128
8:00	*	*	95	106	*	*	*	100
9:00	*	*	73	59	*	*	*	66
10:00	*	*	71	63	*	*	*	66
11:00	*	*	45	34	*	*	*	39
TOTALS	*	*	593	2684	1861	*	*	2776

SITE CODE : 00001130 PIONEER VALLEY PLANNING COMMISSION PAGE: 1
Location : Chester FILE: 1130
Location2 : W. Main St. E/O Middlefield Rd
Operator : R.M.,A.K. DATE: 8/10/92

TIME	MONDAY 10		TUESDAY 11		WEDNESDAY 12		THURSDAY 13		FRIDAY 14		SATURDAY 15		SUNDAY 16		WEEK AVERAGE	
BEGIN	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	5	19	5	16	9	22	1	17	*	*	*	*	5	18
1:00	*	*	4	15	6	9	0	11	4	12	*	*	*	*	3	11
2:00	*	*	3	8	3	3	0	1	1	8	*	*	*	*	1	5
3:00	*	*	5	4	3	6	7	2	4	17	*	*	*	*	4	7
4:00	*	*	13	8	10	4	11	9	8	9	*	*	*	*	10	7
5:00	*	*	51	20	45	21	41	23	44	14	*	*	*	*	45	19
6:00	*	*	82	77	76	77	97	66	75	47	*	*	*	*	82	66
7:00	*	*	76	83	81	83	84	90	79	60	*	*	*	*	80	79
8:00	*	*	93	105	107	105	97	106	95	60	*	*	*	*	98	94
9:00	*	*	67	95	79	118	106	103	*	*	*	*	*	*	84	105
10:00	*	*	91	102	90	126	124	107	*	*	*	*	*	*	101	111
11:00	*	*	89	131	98	124	97	125	*	*	*	*	*	*	94	126
12:00 PM	*	*	102	163	121	149	129	130	*	*	*	*	*	*	117	147
1:00	128	124	115	145	108	210	98	129	*	*	*	*	*	*	112	152
2:00	120	117	106	152	139	134	147	137	*	*	*	*	*	*	128	135
3:00	138	171	141	164	157	185	169	195	*	*	*	*	*	*	151	178
4:00	137	163	128	178	173	204	172	218	*	*	*	*	*	*	152	190
5:00	112	168	119	208	135	200	110	188	*	*	*	*	*	*	119	191
6:00	87	143	102	149	111	171	104	164	*	*	*	*	*	*	101	156
7:00	91	114	52	110	95	129	74	136	*	*	*	*	*	*	78	122
8:00	55	98	59	82	45	100	52	100	*	*	*	*	*	*	52	95
9:00	34	80	27	64	42	85	47	86	*	*	*	*	*	*	37	78
10:00	30	54	40	42	26	43	48	63	*	*	*	*	*	*	36	50
11:00	15	34	21	25	16	36	15	16	*	*	*	*	*	*	16	27
TOTALS	947	1266	1591	2149	1771	2338	1838	2227	311	244	*	*	*	*	1706	2169

COMBINED TOTALS

12:00 AM	*	24	21	31	18	*	*	23
1:00	*	19	15	11	16	*	*	14
2:00	*	11	6	1	9	*	*	6
3:00	*	9	9	9	21	*	*	11
4:00	*	21	14	20	17	*	*	17
5:00	*	71	66	64	58	*	*	64
6:00	*	159	153	163	122	*	*	148
7:00	*	159	164	174	139	*	*	159
8:00	*	198	212	203	155	*	*	192
9:00	*	162	197	209	*	*	*	189
10:00	*	193	216	231	*	*	*	212
11:00	*	220	222	222	*	*	*	220
12:00 PM	*	265	270	259	*	*	*	264
1:00	252	260	318	227	*	*	*	264
2:00	237	258	273	284	*	*	*	263
3:00	309	305	342	364	*	*	*	329
4:00	300	306	377	390	*	*	*	342
5:00	280	327	335	298	*	*	*	310
6:00	230	251	282	268	*	*	*	257
7:00	205	162	224	210	*	*	*	200
8:00	153	141	145	152	*	*	*	147
9:00	114	91	127	133	*	*	*	115
10:00	84	82	69	111	*	*	*	86
11:00	49	46	52	31	*	*	*	43
TOTALS	2213	3740	4109	4065	555	*	*	3875

SITE CODE : 00000044
Location : RUSSELL, RTE. 20
Location2 : W/O RTE. 23
Operator : TZ,CR

PIONEER VALLEY PLANNING COMMISSION

PAGE: 1
FILE: 000044
DATE: 7/10/89

BEGIN	MONDAY 10		TUESDAY 11		WEDNESDAY 12		THURSDAY 13		FRIDAY 14		SATURDAY 15		SUNDAY 16		WEEK AVERAGE	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	*	*	*	*	*	*	99	216	102	237	*	*	100	226
1:00	*	*	*	*	*	*	*	*	155	192	149	193	*	*	152	192
2:00	*	*	*	*	*	*	*	*	152	158	154	175	*	*	153	166
3:00	*	*	*	*	*	*	*	*	155	186	178	159	*	*	166	172
4:00	*	*	*	*	*	*	*	*	139	136	201	181	*	*	170	158
5:00	*	*	*	*	*	*	*	*	207	183	230	172	*	*	218	177
6:00	*	*	*	*	*	*	*	*	195	199	246	224	*	*	220	211
7:00	*	*	*	*	*	*	*	*	290	196	106	104	*	*	198	150
8:00	*	*	*	*	*	*	27	15	328	158	*	*	*	*	177	86
9:00	*	*	*	*	*	*	245	180	297	179	*	*	*	*	271	179
10:00	*	*	*	*	*	*	181	120	193	116	*	*	*	*	187	118
11:00	*	*	*	*	*	*	166	111	151	116	*	*	*	*	158	113
12:00 PM	*	*	*	*	*	*	131	88	132	100	*	*	*	*	131	94
1:00	*	*	*	*	*	*	92	58	130	55	*	*	*	*	111	56
2:00	*	*	*	*	*	*	73	45	69	43	*	*	*	*	71	44
3:00	*	*	*	*	*	*	29	20	36	12	*	*	*	*	32	16
4:00	*	*	*	*	*	*	19	7	24	4	*	*	*	*	21	5
5:00	*	*	*	*	*	*	14	8	11	4	*	*	*	*	12	6
6:00	*	*	*	*	*	*	5	8	11	9	*	*	*	*	8	8
7:00	*	*	*	*	*	*	3	12	15	7	*	*	*	*	9	9
8:00	*	*	*	*	*	*	14	38	23	51	*	*	*	*	18	44
9:00	*	*	*	*	*	*	76	191	62	204	*	*	*	*	69	197
10:00	*	*	*	*	*	*	107	281	107	266	*	*	*	*	107	273
11:00	*	*	*	*	*	*	128	238	150	235	*	*	*	*	139	236
TOTALS	*	*	*	*	*	*	1310	1420	3131	3025	1366	1445	*	*	2898	2936

COMBINED TOTALS

12:00 AM	*	*	*	*	315	339	*	326
1:00	*	*	*	*	347	342	*	344
2:00	*	*	*	*	310	329	*	319
3:00	*	*	*	*	341	337	*	338
4:00	*	*	*	*	275	382	*	328
5:00	*	*	*	*	390	402	*	395
6:00	*	*	*	*	394	470	*	431
7:00	*	*	*	*	486	210	*	348
8:00	*	*	*	42	486	*	*	263
9:00	*	*	*	425	476	*	*	450
10:00	*	*	*	301	309	*	*	305
11:00	*	*	*	277	267	*	*	271
12:00 PM	*	*	*	219	232	*	*	225
1:00	*	*	*	150	185	*	*	167
2:00	*	*	*	118	112	*	*	115
3:00	*	*	*	49	48	*	*	48
4:00	*	*	*	26	28	*	*	26
5:00	*	*	*	22	15	*	*	18
6:00	*	*	*	13	20	*	*	16
7:00	*	*	*	15	22	*	*	18
8:00	*	*	*	52	74	*	*	62
9:00	*	*	*	267	266	*	*	266
10:00	*	*	*	388	373	*	*	380
11:00	*	*	*	366	385	*	*	375
TOTALS	*	*	*	2730	6156	2811	*	5834

APPENDIX C:

ROADWAY SURFACE CONDITIONS

SCENIC BYWAY
General Roadway Streets Listing
ALL records
Sorted By: Street Name & Section
07/15/93

Street Name: ROUTE 20 (BECKET) From: 16th Mile
Section ID: 17 To: 17th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 28 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (BECKET) From: 17th Mile
Section ID: 18 To: 18th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (BECKET) From: 18th Mile
Section ID: 19 To: 19th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (BECKET) From: 19th Mile
Section ID: 20 To: 20th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (BECKET) From: 20th Mile
Section ID: 21 To: 21st Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (BECKET) From: 21st Mile
Section ID: 22 To: 22nd Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 40 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (BECKET) From: 22nd Mile
Section ID: 23 To: 23rd Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 40 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (BECKET) From: 23rd Mile
Section ID: 24 To: 24th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 40 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (BECKET) From: 24th Mile
Section ID: 25 To: 25th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (BECKET) From: 25th Mile
Section ID: 26 To: 26th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (CHESTER) From: 10th Mile
Section ID: 11 To: 11th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (CHESTER) From: 11th Mile
Section ID: 12 To: 12th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (CHESTER) From: 12th Mile
Section ID: 13 To: 13th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (CHESTER) From: 13th Mile
Section ID: 14 To: 14th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (CHESTER) From: 14th Mile
Section ID: 15 To: 15th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (CHESTER) From: 15th Mile
Section ID: 16 To: 16th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (LEE) From: 27th Mile
Section ID: 28 To: 28th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (LEE) From: 28th Mile
Section ID: 29 To: 29th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (LEE) From: 29th Mile
Section ID: 30 To: 30th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 28 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (LEE) From: 30th Mile
Section ID: 31 To: 31st Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 28 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (RUSS&HUNT) From: 6th Mile
Section ID: 7 To: 7th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (RUSSELL) From: Westfield C.L
Section ID: 1 To: 1St Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 40 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (RUSSELL) From: 1St Mile
Section ID: 2 To: 2nd Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 40 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (RUSSELL) From: 3rd Mile
Section ID: 4 To: 4th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 32 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (RUSSELL) From: 4th Mile
Section ID: 5 To: 5th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (RUSSELL) From: 5th Mile
Section ID: 6 To: 6th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (RUSSELL) From: 2nd Mile
Section ID: 301 To: 0.6 Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 3168 District:
Width: 40 Street ID:

Number of Travel Lanes: 3 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20 (RUSSELL) From: 0.6 Mile
Section ID: 302 To: 3rd Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 2112 District:
Width: 40 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20(HUNTINGTON) From: 7th Mile
Section ID: 8 To: 8th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20(HUNTINGTON) From: 8th Mile
Section ID: 9 To: 9th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 32 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20(HUNTINGTON) From: 9th Mile
Section ID: 10 To: 10th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

Street Name: ROUTE 20(LEE&BECKET) From: 26th Mile
Section ID: 27 To: 27th Mile

Classification: 1 Arterial
Pavement Type: 1 Bituminous Concrete
Zone: 4 Rural

Length: 5280 District:
Width: 30 Street ID:

Number of Travel Lanes: 2 Special Route Designations:
Number of Parking Lanes: 0
One Way: No 1:
ADT: 5000 2:
Percent Truck Traffic: 0 3:
ROW Width: 0

SCENIC BYWAY
Asphalt Module Detail Listing
ALL records
Sorted By: Street Name & Section
07/15/93

Street Name: ROUTE 20 (BECKET) From: 16th Mile
Section ID: 17 To: 17th Mile
Sample Lot From: To:

Distress	Severity	Extent
Weathering/Block Cracking	L <= 1/4"	1 0 - 5
Trans. and Long. Cracking	M 1/4" - 1/2"	2 >5 - 50

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Bridge#BO-3008.Almost all distresses appear close to Chester
Repair: ROUTINE MAINT. Current Cost: 13963 Benefit: 3
Base Index: 100
Surface Index: 97
Pavement Condition Index (PCI): 85

Street Name: ROUTE 20 (BECKET) From: 17th Mile
Section ID: 18 To: 18th Mile
Sample Lot From: To:

Distress	Severity	Extent
Trans. and Long. Cracking	L 1/4"	1 0 - 5

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Bridge#BO-3011,BO-3010. Segment in good shape.
Repair: NO ACTION Current Cost: 0 Benefit:
Base Index: 100
Surface Index: 100
Pavement Condition Index (PCI): 99

Street Name: ROUTE 20 (BECKET) From: 18th Mile
Section ID: 19 To: 19th Mile
Sample Lot From: To:

Distress	Severity	Extent
Trans. and Long. Cracking	L 1/4"	1 0 - 5

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Bridge#BO-1032, BO-3031, BO-3034
Repair: NO ACTION Current Cost: 0 Benefit: 0
Base Index: 100
Surface Index: 100
Pavement Condition Index (PCI): 99

Street Name: ROUTE 20 (BECKET) From: 19th Mile
Section ID: 20 To: 20th Mile
Sample Lot From: To:

Distress	Severity	Extent
Distortion	L Light	1 0 - 1
Trans. and Long. Cracking	M 1/4" - 1/2"	1 0 - 5

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:
Repair: NO ACTION Current Cost: 0 Benefit: 0
Base Index: 98
Surface Index: 99
Pavement Condition Index (PCI): 95

Street Name: ROUTE 20 (BECKET) From: 20th Mile
Section ID: 21 To: 21st Mile
Sample Lot From: To:

Distress	Severity	Extent
Trans. and Long. Cracking	M 1/4" - 1/2"	1 0 - 5

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Some patch work.
Repair: NO ACTION Current Cost: 0 Benefit:
Base Index: 100
Surface Index: 99
Pavement Condition Index (PCI): 95

Street Name: ROUTE 20 (BECKET) From: 21st Mile
Section ID: 22 To: 22nd Mile
Sample Lot From: To:

Distress	Severity	Extent
Trans. and Long. Cracking	M 1/4" - 1/2"	1 0 - 5

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:
Repair: NO ACTION Current Cost: 0 Benefit:
Base Index: 100
Surface Index: 99
Pavement Condition Index (PCI): 95

Street Name: ROUTE 20 (BECKET) From: 22nd Mile
Section ID: 23 To: 23rd Mile
Sample Lot From: To:

Distress	Severity	Extent
Trans. and Long. Cracking	H > 1/2"	1 0 - 5

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Good shape.
Repair: ROUTINE MAINT. Current Cost: 19947 Benefit: 215
Base Index: 100
Surface Index: 98
Pavement Condition Index (PCI): 90

Street Name: ROUTE 20 (BECKET) From: 23rd Mile
Section ID: 24 To: 24th Mile
Sample Lot From: To:

Distress	Severity	Extent
Trans. and Long. Cracking	M 1/4" - 1/2"	1 0 - 5

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Good shape.
Repair: NO ACTION Current Cost: 0 Benefit: 0
Base Index: 100
Surface Index: 99
Pavement Condition Index (PCI): 95

Street Name: ROUTE 20 (BECKET) From: 24th Mile
Section ID: 25 To: 25th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	L Light	1 0 - 1
Distortion	L Light	1 0 - 1
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Patch work.
Repair: PREVENTITIVE MAINT. Current Cost: 50160 Benefit: 12
Base Index: 95
Surface Index: 96
Pavement Condition Index (PCI): 78

Street Name: ROUTE 20 (BECKET) From: 25th Mile
Section ID: 26 To: 26th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	H Heavy	3 >5 - 10
Distortion	L Light	1 0 - 1
Rutting	M 1/2" - 1 1/2"	1 0 - 5
Weathering/Block Cracking	M > 1/4"	1 0 - 5
Trans. and Long. Cracking	H > 1/2"	1 0 - 5

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Patch work.
Repair: RECONST.OR RECLAIM Current Cost: 440000 Benefit: 8
Base Index: 70
Surface Index: 97
Pavement Condition Index (PCI): 54

Street Name: ROUTE 20 (CHESTER) From: 10th Mile
Section ID: 11 To: 11th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	M Medium	2 >1 - 5
Weathering/Block Cracking	L <= 1/4"	1 0 - 5
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Bridge#C1-1036. Some patch work. Good shape.
Repair: PREVENTITIVE MAINT. Current Cost: 50160 Benefit: 123
Base Index: 90
Surface Index: 96
Pavement Condition Index (PCI): 78

Street Name: ROUTE 20 (CHESTER) From: 11th Mile
Section ID: 12 To: 12th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	M Medium	2 >1 - 5
Rutting	L 1/4" - 1/2"	1 0 - 5
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50
Bleeding/Polished Aggregate	H Hazard	E EXTENSIVE

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Bridge#C1-1029. Patch work. Good shape.
Repair: PREVENTITIVE MAINT. Current Cost: 50160 Benefit: 130
Base Index: 90
Surface Index: 88
Pavement Condition Index (PCI): 74

Street Name: ROUTE 20 (CHESTER) From: 12th Mile
Section ID: 13 To: 13th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	M Medium	2 >1 - 5
Rutting	M 1/2" - 1 1/2"	1 0 - 5
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50
Bleeding/Polished Aggregate	H Hazard	L LOCALIZED

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Rest area at 1 mile.
Repair: PREVENTITIVE MAINT. Current Cost: 50160 Benefit: 13
Base Index: 83
Surface Index: 95
Pavement Condition Index (PCI): 74

Street Name: ROUTE 20 (CHESTER) From: 13th Mile
Section ID: 14 To: 14th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	M Medium	2 >1 - 5
Weathering/Block Cracking	M > 1/4"	1 0 - 5
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50
Bleeding/Polished Aggregate	H Hazard	L LOCALIZED

Survey Date: 05/24/93 Average Curb Reveal: 5.0
Comments:Bridge#C1-1035. Exposed steel. Severe cracking.
Repair: PREVENTITIVE MAINT. Current Cost: 50160 Benefit: 12
Base Index: 90
Surface Index: 94
Pavement Condition Index (PCI): 77

Street Name: ROUTE 20 (CHESTER) From: 14th Mile
Section ID: 15 To: 15th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	M Medium	2 >1 - 5
Distortion	L Light	1 0 - 1
Weathering/Block Cracking	M > 1/4"	1 0 - 5
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50

Survey Date: 05/24/93 Average Curb Reveal: 5.0
Comments:Bridge#C1-1028. Large stone retaining wall.
Repair: PREVENTITIVE MAINT. Current Cost: 50160 Benefit: 126
Base Index: 88
Surface Index: 95
Pavement Condition Index (PCI): 76

Street Name: ROUTE 20 (CHESTER) From: 15th Mile
Section ID: 16 To: 16th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	H Heavy	2 >1 - 5
Rutting	M 1/2" - 1 1/2"	1 0 - 5
Weathering/Block Cracking	M > 1/4"	1 0 - 5
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Bridge#3008(Becket).Broken retaining wall.Rest area@0.3 mile
Repair: REHABILITATION Current Cost: 154000 Benefit: 147
Base Index: 78
Surface Index: 95
Pavement Condition Index (PCI): 64

Street Name: ROUTE 20 (LEE) From: 27th Mile
Section ID: 28 To: 28th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	H Heavy	2 >1 - 5
Distortion	H Heavy	2 >1 - 5
Rutting	L 1/4" - 1/2"	1 0 - 5
Weathering/Block Cracking	M > 1/4"	1 0 - 5
Trans. and Long. Cracking	M 1/4" - 1/2"	2 >5 - 50
Surface Wear & Raveling	H Heavy	L LOCALIZED

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:
Repair: REHABILITATION Current Cost: 154000 Benefit: 15(
Base Index: 70
Surface Index: 95
Pavement Condition Index (PCI): 60

Street Name: ROUTE 20 (LEE) From: 28th Mile
Section ID: 29 To: 29th Mile
Sample Lot From: To:

Distress	Severity	Extent
Weathering/Block Cracking	M > 1/4"	1 0 - 5
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Bridge 40'in width over Mass Pike.Lots of patch work.
Repair: PREVENTITIVE MAINT. Current Cost: 50160 Benefit: 12(
Base Index: 100
Surface Index: 95
Pavement Condition Index (PCI): 80

Street Name: ROUTE 20 (LEE) From: 29th Mile
Section ID: 30 To: 30th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	M Medium	1 0 - 1
Distortion	M Medium	2 >1 - 5
Rutting	L 1/4" - 1/2"	1 0 - 5
Weathering/Block Cracking	M > 1/4"	1 0 - 5
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Bridge#L-5-24. Lots of patching.
Repair: PREVENTITIVE MAINT. Current Cost: 46816 Benefit: 137
Base Index: 85
Surface Index: 95
Pavement Condition Index (PCI): 75

Street Name: ROUTE 20 (LEE) From: 30th Mile
Section ID: 31 To: 31st Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	M Medium	2 >1 - 5
Distortion	M Medium	2 >1 - 5
Weathering/Block Cracking	M > 1/4"	2 >5 - 50
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:
Repair: PREVENTITIVE MAINT. Current Cost: 46816 Benefit: 143
Base Index: 80
Surface Index: 94
Pavement Condition Index (PCI): 72

Street Name: ROUTE 20 (RUSS&HUNT) From: 6th Mile
Section ID: 7 To: 7th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	M Medium	1 0 - 1
Distortion	M Medium	1 0 - 1
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Huntington T.L at 0.6 mile. Rest area at 0.4 into Huntington
Repair: PREVENTITIVE MAINT. Current Cost: 50160 Benefit: 12
Base Index: 90
Surface Index: 96
Pavement Condition Index (PCI): 75

Street Name: ROUTE 20 (RUSSELL) From: Westfield C.L
Section ID: 1 To: 1St Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	L Light	1 0 - 1
Distortion	L Light	1 0 - 1
Weathering/Block Cracking	M > 1/4"	1 0 - 5
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:
Repair: PREVENTITIVE MAINT. Current Cost: 66880 Benefit: 9
Base Index: 95
Surface Index: 95
Pavement Condition Index (PCI): 77

Street Name: ROUTE 20 (RUSSELL) From: 1St Mile
Section ID: 2 To: 2nd Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	M Medium	2 >1 - 5
Distortion	M Medium	1 0 - 1
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:
Repair: PREVENTITIVE MAINT. Current Cost: 66880 Benefit: 95
Base Index: 85
Surface Index: 96
Pavement Condition Index (PCI): 76

Street Name: ROUTE 20 (RUSSELL) From: 3rd Mile
Section ID: 4 To: 4th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	M Medium	2 >1 - 5
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50
Bleeding/Polished Aggregate	H Hazard	E EXTENSIVE

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Narrow shoulder.TCL WB.Bridge#R1-304,some conc decay-patch.
Repair: PREVENTITIVE MAINT. Current Cost: 53504 Benefit: 120
Base Index: 90
Surface Index: 88
Pavement Condition Index (PCI): 75

Street Name: ROUTE 20 (RUSSELL) From: 4th Mile
Section ID: 5 To: 5th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	M Medium	1 0 - 1
Trans. and Long. Cracking	M 1/4" - 1/2"	2 >5 - 50

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:
Repair: PREVENTITIVE MAINT. Current Cost: 50160 Benefit: 11
Base Index: 95
Surface Index: 97
Pavement Condition Index (PCI): 83

Street Name: ROUTE 20 (RUSSELL) From: 5th Mile
Section ID: 6 To: 6th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	M Medium	1 0 - 1
Distortion	M Medium	1 0 - 1
Trans. and Long. Cracking	M 1/4" - 1/2"	2 >5 - 50

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:
Repair: PREVENTITIVE MAINT. Current Cost: 50160 Benefit: 12
Base Index: 90
Surface Index: 97
Pavement Condition Index (PCI): 80

Street Name: ROUTE 20 (RUSSELL) From: 2nd Mile
Section ID: 301 To: 0.6 Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	M Medium	2 >1 - 5
Distortion	L Light	1 0 - 1
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Pavement change at 0.6 mile. Truck climbing lane EB.
Repair: PREVENTITIVE MAINT. Current Cost: 40128 Benefit: 94
Base Index: 88
Surface Index: 96
Pavement Condition Index (PCI): 77

Street Name: ROUTE 20 (RUSSELL) From: 0.6 Mile
Section ID: 302 To: 3rd Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	M Medium	2 >1 - 5
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50
Bleeding/Polished Aggregate	H Hazard	L LOCALIZED

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:
Repair: PREVENTITIVE MAINT. Current Cost: 26752 Benefit: 92
Base Index: 90
Surface Index: 95
Pavement Condition Index (PCI): 78

Street Name: ROUTE 20(HUNTINGTON) From: 7th Mile
Section ID: 8 To: 8th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	M Medium	1 0 - 1
Distortion	M Medium	1 0 - 1
Rutting	L 1/4" - 1/2"	1 0 - 5
Weathering/Block Cracking	M > 1/4"	1 0 - 5
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:
Repair: PREVENTITIVE MAINT. Current Cost: 50160 Benefit: 1
Base Index: 90
Surface Index: 95
Pavement Condition Index (PCI): 74

Street Name: ROUTE 20(HUNTINGTON) From: 8th Mile
Section ID: 9 To: 9th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	H Heavy	3 >5 - 10
Distortion	L Light	1 0 - 1
Rutting	M 1/2" - 1 1/2"	1 0 - 5
Weathering/Block Cracking	M > 1/4"	1 0 - 5
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Poor pavement markings.
Repair: RECONST.OR RECLAIM Current Cost: 469333 Benefit: 7
Base Index: 70
Surface Index: 95
Pavement Condition Index (PCI): 53

Street Name: ROUTE 20(HUNTINGTON) From: 9th Mile
Section ID: 10 To: 10th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	H Heavy	2 >1 - 5
Distortion	L Light	1 0 - 1
Rutting	L 1/4" - 1/2"	1 0 - 5
Weathering/Block Cracking	M > 1/4"	1 0 - 5
Trans. and Long. Cracking	H > 1/2"	2 >5 - 50
Bleeding/Polished Aggregate	H Hazard	E EXTENSIVE

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Scenic area at 0.7 miles.
Repair: REHABILITATION Current Cost: 154000 Benefit: 149
Base Index: 82
Surface Index: 87
Pavement Condition Index (PCI): 63

Street Name: ROUTE 20(LEE&BECKET) From: 26th Mile
Section ID: 27 To: 27th Mile
Sample Lot From: To:

Distress	Severity	Extent
Travel Lane Alligatoring	H Heavy	2 >1 - 5
Distortion	M Medium	1 0 - 1
Rutting	M 1/2" - 1 1/2"	1 0 - 5
Weathering/Block Cracking	M > 1/4"	2 >5 - 50
Trans. and Long. Cracking	M 1/4" - 1/2"	2 >5 - 50

Survey Date: 05/24/93 Average Curb Reveal: 0.0
Comments:Some patch work.
Repair: REHABILITATION Current Cost: 154000 Benefit: 154
Base Index: 73
Surface Index: 95
Pavement Condition Index (PCI): 61

SCENIC BYWAY
Repair Types Setups
10/14/93

Repair Number	Repair Name	Unit Cost (sq.yds.)	Est. Repair Life (years)	Index Values After Repair
1	RECONST.OR RECLAIM	25.00	20	99
2	REHABILITATION	8.75	15	99
3	PREVENTITIVE MAINT.	2.85	5	97
4	ROUTINE MAINT.	0.85	4	97
5	NO ACTION	0.00	1	95
6		0.00	0	0
7		0.00	0	0
8		0.00	0	0
9		0.00	0	0

SCENIC BYWAY
Asphalt Module Summary Listing
Section ID greater than 0 AND less than 9999999
Sorted By: Street Name & Section
10/14/93

Street Name	Sect. ID	Length (ft)	Curb Reveal	PCI	Repair	Current Cost	Benefit Value	Survey Date
ROUTE 20 (BECKET)	17	5280	0.0	85	4	13963	325	05/24/93
ROUTE 20 (BECKET)	18	5280	0.0	99	5	0	0	05/24/93
ROUTE 20 (BECKET)	19	5280	0.0	99	5	0	0	05/24/93
ROUTE 20 (BECKET)	20	5280	0.0	95	5	0	0	05/24/93
ROUTE 20 (BECKET)	21	5280	0.0	95	5	0	0	05/24/93
ROUTE 20 (BECKET)	22	5280	0.0	95	5	0	0	05/24/93
ROUTE 20 (BECKET)	23	5280	0.0	90	4	19947	215	05/24/93
ROUTE 20 (BECKET)	24	5280	0.0	95	5	0	0	05/24/93
ROUTE 20 (BECKET)	25	5280	0.0	78	3	50160	123	05/24/93
ROUTE 20 (BECKET)	26	5280	0.0	54	1	440000	81	05/24/93
ROUTE 20 (CHESTER)	11	5280	0.0	78	3	50160	123	05/24/93
ROUTE 20 (CHESTER)	12	5280	0.0	74	3	50160	130	05/24/93
ROUTE 20 (CHESTER)	13	5280	0.0	74	3	50160	130	05/24/93
ROUTE 20 (CHESTER)	14	5280	5.0	77	3	50160	125	05/24/93
ROUTE 20 (CHESTER)	15	5280	5.0	76	3	50160	126	05/24/93
ROUTE 20 (CHESTER)	16	5280	0.0	64	2	154000	147	05/24/93
ROUTE 20 (LEE)	28	5280	0.0	60	2	154000	156	05/24/93
ROUTE 20 (LEE)	29	5280	0.0	80	3	50160	120	05/24/93
ROUTE 20 (LEE)	30	5280	0.0	75	3	46816	137	05/24/93
ROUTE 20 (LEE)	31	5280	0.0	72	3	46816	143	05/24/93
ROUTE 20 (RUSS&HUNT)	7	5280	0.0	75	3	50160	128	05/24/93
ROUTE 20 (RUSSELL)	1	5280	0.0	77	3	66880	94	05/24/93
ROUTE 20 (RUSSELL)	2	5280	0.0	76	3	66880	95	05/24/93
ROUTE 20 (RUSSELL)	4	5280	0.0	75	3	53504	120	05/24/93
ROUTE 20 (RUSSELL)	5	5280	0.0	83	3	50160	116	05/24/93
ROUTE 20 (RUSSELL)	6	5280	0.0	80	3	50160	120	05/24/93
ROUTE 20 (RUSSELL)	301	3168	0.0	77	3	40128	94	05/24/93
ROUTE 20 (RUSSELL)	302	2112	0.0	78	3	26752	92	05/24/93
ROUTE 20(HUNTINGTON)	8	5280	0.0	74	3	50160	130	05/24/93
ROUTE 20(HUNTINGTON)	9	5280	0.0	53	1	469333	77	05/24/93
ROUTE 20(HUNTINGTON)	10	5280	0.0	63	2	154000	149	05/24/93
ROUTE 20(LEE&BECKET)	27	5280	0.0	61	2	154000	154	05/24/93
Grand Total:		163680				2458779		

SCENIC BYWAY
Asphalt Module Summary Listing
ALL records
Sorted By: PCI - Ascending
10/14/93

Street Name	Sect. ID	Length (ft)	Curb Reveal	PCI	Repair	Current Cost	Benefit Value	Survey Date
ROUTE 20(HUNTINGTON)	9	5280	0.0	53	1	469333	77	05/24/93
ROUTE 20 (BECKET)	26	5280	0.0	54	1	440000	81	05/24/93
ROUTE 20 (LEE)	28	5280	0.0	60	2	154000	156	05/24/93
ROUTE 20(LEE&BECKET)	27	5280	0.0	61	2	154000	154	05/24/93
ROUTE 20(HUNTINGTON)	10	5280	0.0	63	2	154000	149	05/24/93
ROUTE 20 (CHESTER)	16	5280	0.0	64	2	154000	147	05/24/93
ROUTE 20 (LEE)	31	5280	0.0	72	3	46816	143	05/24/93
ROUTE 20(HUNTINGTON)	8	5280	0.0	74	3	50160	130	05/24/93
ROUTE 20 (CHESTER)	12	5280	0.0	74	3	50160	130	05/24/93
ROUTE 20 (CHESTER)	13	5280	0.0	74	3	50160	130	05/24/93
ROUTE 20 (RUSSELL)	4	5280	0.0	75	3	53504	120	05/24/93
ROUTE 20 (RUSS&HUNT)	7	5280	0.0	75	3	50160	128	05/24/93
ROUTE 20 (LEE)	30	5280	0.0	75	3	46816	137	05/24/93
ROUTE 20 (RUSSELL)	2	5280	0.0	76	3	66880	95	05/24/93
ROUTE 20 (CHESTER)	15	5280	5.0	76	3	50160	126	05/24/93
ROUTE 20 (RUSSELL)	1	5280	0.0	77	3	66880	94	05/24/93
ROUTE 20 (RUSSELL)	301	3168	0.0	77	3	40128	94	05/24/93
ROUTE 20 (CHESTER)	14	5280	5.0	77	3	50160	125	05/24/93
ROUTE 20 (RUSSELL)	302	2112	0.0	78	3	26752	92	05/24/93
ROUTE 20 (CHESTER)	11	5280	0.0	78	3	50160	123	05/24/93
ROUTE 20 (BECKET)	25	5280	0.0	78	3	50160	123	05/24/93
ROUTE 20 (RUSSELL)	6	5280	0.0	80	3	50160	120	05/24/93
ROUTE 20 (LEE)	29	5280	0.0	80	3	50160	120	05/24/93
ROUTE 20 (RUSSELL)	5	5280	0.0	83	3	50160	116	05/24/93
ROUTE 20 (BECKET)	17	5280	0.0	85	4	13963	325	05/24/93
ROUTE 20 (BECKET)	23	5280	0.0	90	4	19947	215	05/24/93
ROUTE 20 (BECKET)	20	5280	0.0	95	5	0	0	05/24/93
ROUTE 20 (BECKET)	21	5280	0.0	95	5	0	0	05/24/93
ROUTE 20 (BECKET)	22	5280	0.0	95	5	0	0	05/24/93
ROUTE 20 (BECKET)	24	5280	0.0	95	5	0	0	05/24/93
ROUTE 20 (BECKET)	18	5280	0.0	99	5	0	0	05/24/93
ROUTE 20 (BECKET)	19	5280	0.0	99	5	0	0	05/24/93
Grand Total:		163680				2458779		

SCENIC BYWAY
Asphalt Module Summary Listing
ALL records
Sorted By: Benefit Value Descending
10/14/93

Street Name	Sect. ID	Length (ft)	Curb Reveal	PCI	Repair	Current Cost	Benefit Value	Survey Date
ROUTE 20 (BECKET)	17	5280	0.0	85	4	13963	325	05/24/93
ROUTE 20 (BECKET)	23	5280	0.0	90	4	19947	215	05/24/93
ROUTE 20 (LEE)	28	5280	0.0	60	2	154000	156	05/24/93
ROUTE 20(LEE&BECKET)	27	5280	0.0	61	2	154000	154	05/24/93
ROUTE 20(HUNTINGTON)	10	5280	0.0	63	2	154000	149	05/24/93
ROUTE 20 (CHESTER)	16	5280	0.0	64	2	154000	147	05/24/93
ROUTE 20 (LEE)	31	5280	0.0	72	3	46816	143	05/24/93
ROUTE 20 (LEE)	30	5280	0.0	75	3	46816	137	05/24/93
ROUTE 20(HUNTINGTON)	8	5280	0.0	74	3	50160	130	05/24/93
ROUTE 20 (CHESTER)	12	5280	0.0	74	3	50160	130	05/24/93
ROUTE 20 (CHESTER)	13	5280	0.0	74	3	50160	130	05/24/93
ROUTE 20 (RUSS&HUNT)	7	5280	0.0	75	3	50160	128	05/24/93
ROUTE 20 (CHESTER)	15	5280	5.0	76	3	50160	126	05/24/93
ROUTE 20 (CHESTER)	14	5280	5.0	77	3	50160	125	05/24/93
ROUTE 20 (CHESTER)	11	5280	0.0	78	3	50160	123	05/24/93
ROUTE 20 (BECKET)	25	5280	0.0	78	3	50160	123	05/24/93
ROUTE 20 (RUSSELL)	4	5280	0.0	75	3	53504	120	05/24/93
ROUTE 20 (RUSSELL)	6	5280	0.0	80	3	50160	120	05/24/93
ROUTE 20 (LEE)	29	5280	0.0	80	3	50160	120	05/24/93
ROUTE 20 (RUSSELL)	5	5280	0.0	83	3	50160	116	05/24/93
ROUTE 20 (RUSSELL)	2	5280	0.0	76	3	66880	95	05/24/93
ROUTE 20 (RUSSELL)	1	5280	0.0	77	3	66880	94	05/24/93
ROUTE 20 (RUSSELL)	301	3168	0.0	77	3	40128	94	05/24/93
ROUTE 20 (RUSSELL)	302	2112	0.0	78	3	26752	92	05/24/93
ROUTE 20 (BECKET)	26	5280	0.0	54	1	440000	81	05/24/93
ROUTE 20(HUNTINGTON)	9	5280	0.0	53	1	469333	77	05/24/93
ROUTE 20 (BECKET)	18	5280	0.0	99	5	0	0	05/24/93
ROUTE 20 (BECKET)	19	5280	0.0	99	5	0	0	05/24/93
ROUTE 20 (BECKET)	20	5280	0.0	95	5	0	0	05/24/93
ROUTE 20 (BECKET)	21	5280	0.0	95	5	0	0	05/24/93
ROUTE 20 (BECKET)	22	5280	0.0	95	5	0	0	05/24/93
ROUTE 20 (BECKET)	24	5280	0.0	95	5	0	0	05/24/93
Grand Total:		163680				2458779		

APPENDIX D:

ACCIDENT DATA BY COMMUNITY

JACOBS LADDER TRAIL
Scenic Byways Project

Location	Year	Number of Accidents	Type		Severity	
Russell						
Not specified	89	16	Angle	7	PD	18
	90	6	Rear end	1	PI	11
	91	8	Head on	4	F	1
			Pedestrian			
			Fixed object	10		
			Other	7		
			Overturned	1		
Westfield Town Line	89		Angle		PD	1
	90		Rear end		PI	
	91	2	Head on		F	1
			Pedestrian			
			Fixed object	2		
			Other			
Old Route 20	89		Angle	2	PD	1
	90	2	Rear end		PI	1
	91		Head on		F	
			Pedestrian			
			Fixed object			
			Other			
Route 23	89	4	Angle	1	PD	7
	90	2	Rear end	3	PI	1
	91	2	Head on		F	
			Pedestrian			
			Fixed object	3		
			Other	1		
Strathmore Mill Road	89		Angle		PD	
	90		Rear end		PI	1
	91	1	Head on		F	
			Pedestrian			
			Fixed object	1		
			Other			
Blandford Stage Road	89		Angle	2	PD	1
	90	1	Rear end		PI	1
	91	1	Head on		F	
			Pedestrian			
			Fixed object			
			Other			

JACOBS LADDER TRAIL
Scenic Byways Project

Location	Year	Number of Accidents	Type		Severity	
Main Street	89		Angle	1	PD	2
	90	3	Rear end	2	PI	2
	91	1	Head on		F	
			Pedestrian			
			Fixed object	1		
			Other			
Fairview Avenue	89		Angle		PD	
	90	1	Rear end		PI	1
	91		Head on		F	
			Pedestrian			
			Fixed object			
			Other	1		
Rocky Branch Road	89		Angle		PD	
	90	1	Rear end		PI	
	91		Head on		F	1
			Pedestrian	1		
			Fixed object			
			Other			
Raymour Drive	89		Angle		PD	1
	90	1	Rear end		PI	
	91		Head on		F	
			Pedestrian			
			Fixed object			
			Other	1		
Cumberland Farms	89	1	Angle	3	PD	2
	90	2	Rear end		PI	1
	91		Head on		F	
			Pedestrian			
			Fixed object			
			Other			
100' w/o Whippernon	89	1	Angle		PD	1
Parking Lot	90		Rear end		PI	
	91		Head on		F	
			Pedestrian			
			Fixed object			
			Other	1		

JACOBS LADDER TRAIL
Scenic Byways Project

Location	Year	Number of Accidents	Type		Severity	
Net and T 847S	89		Angle		PD	
	90	1	Rear end	1	PI	1
	91		Head on		F	
			Pedestrian			
			Fixed object			
			Other			
Huntington						
Not Specified	89	3	Angle	3	PD	4
	90	2	Rear end	2	PI	3
	91	2	Head on		F	
			Pedestrian			
			Fixed object	1		
			Other	1		
Route 112	89	1	Angle	2	PD	1
	90		Rear end		PI	2
	91	2	Head on		F	
			Pedestrian			
			Fixed object	1		
			Other			
Chester						
Not Specified	89	4	Angle	3	PD	7
	90	4	Rear end		PI	10
	91	9	Head on	1	F	
			Pedestrian			
			Fixed object	7		
			Other	6		
Hampden Street	89	1	Angle		PD	1
	90		Rear end		PI	
	91		Head on		F	
			Pedestrian			
			Fixed object			
			Other	1		
Blandford Road	89	2	Angle		PD	3
	90	1	Rear end	1	PI	
	91		Head on		F	
			Pedestrian			
			Fixed object			
			Other	2		

JACOBS LADDER TRAIL
Scenic Byways Project

Location	Year	Number of Accidents	Type		Severity	
Chester Park	89		Angle		PD	1
	90		Rear end		PI	
	91	1	Head on		F	
			Pedestrian			
			Fixed object			
			Other	1		
Bannish Lumber	89		Angle		PD	1
	90		Rear end		PI	1
	91	2	Head on		F	
			Pedestrian			
			Fixed object	1		
			Other			
			Overturned	1		
Main Street	89	1	Angle		PD	2
	90	2	Rear end		PI	1
	91		Head on		F	
			Pedestrian			
			Fixed object	2		
			Other	1		
Becket						
Not Specified	89	15	Angle	3	PD	18
	90	3	Rear end		PI	6
	91	7	Head on		F	1
			Pedestrian			
			Fixed object	12		
			Other	9		
			Overturned	1		
200 ' e/o Wade Inn Road	89	1	Angle		PD	1
	90		Rear end		PI	
	91		Head on		F	
			Pedestrian			
			Fixed object			
			Other			
600' e/o Route 8	89	1	Angle	1	PD	2
	90	1	Rear end		PI	
	91		Head on		F	
			Pedestrian			
			Fixed object	1		
			Other			

JACOBS LADDER TRAIL
Scenic Byways Project

Location	Year	Number of Accidents	Type		Severity	
Route 8	89		Angle	1	PD	3
	90	4	Rear end	2	PI	3
	91	2	Head on		F	
			Pedestrian			
			Fixed object	1		
			Other	2		
Well Road / Hamilton Road	89	1	Angle	2	PD	3
	90	1	Rear end		PI	
	91	1	Head on		F	
			Pedestrian			
			Fixed object	1		
			Other			
Fred Snow Road	89		Angle	2	PD	1
	90	2	Rear end		PI	1
	91		Head on		F	
			Pedestrian			
			Fixed object			
			Other			
George Carter Road	89		Angle		PD	
	90	1	Rear end		PI	1
	91		Head on		F	
			Pedestrian			
			Fixed object	1		
			Other			
1000' e/o Turnpike bridge	89		Angle		PD	1
	90	1	Rear end		PI	
	91		Head on		F	
			Pedestrian			
			Fixed object	1		
			Other			
208' w/o Route 8	89		Angle		PD	
	90	1	Rear end		PI	1
	91		Head on	1	F	
			Pedestrian			
			Fixed object			
			Other			

JACOBS LADDER TRAIL
Scenic Byways Project

Location	Year	Number of Accidents	Type		Severity	
e/o Tyne Road	89		Angle	1	PD	2
	90	2	Rear end		PI	
	91		Head on		F	
			Pedestrian			
			Fixed object	1		
			Other			
Lee						
Not Specified	89	13	Angle	8	PD	21
	90	9	Rear end	6	PI	13
	91	13	Head on	3	F	1
			Pedestrian	1		
			Fixed object	8		
			Other	7		
			Overturned	2		
Silver Street	89		Angle		PD	1
	90	1	Rear end		PI	
	91		Head on	1	F	
			Pedestrian			
			Fixed object			
			Other			
Forest Street	89	1	Angle		PD	1
	90		Rear end		PI	
	91		Head on		F	
			Pedestrian			
			Fixed object	1		
			Other			
Route 102	89	4	Angle	2	PD	5
	90	2	Rear end	1	PI	1
	91		Head on		F	
			Pedestrian			
			Fixed object			
			Other	3		
Turnpike Exit	89		Angle	1	PD	3
	90	3	Rear end	3	PI	3
	91	3	Head on	1	F	
			Pedestrian			
			Fixed object	1		
			Other			

JACOBS LADDER TRAIL
Scenic Byways Project

Location	Year	Number of Accidents	Type		Severity	
1500' w/o Water Street	89		Angle	1	PD	
	90	1	Rear end		PI	1
	91		Head on		F	
			Pedestrian			
			Fixed object			
			Other			
Maple Street	89		Angle		PD	1
	90		Rear end		PI	
	91	1	Head on		F	
			Pedestrian			
			Fixed object			
			Other	1		
High Street	89	5	Angle	6	PD	7
	90	2	Rear end	1	PI	3
	91	3	Head on	1	F	
			Pedestrian	1		
			Fixed object			
			Other	1		
Main Street	89	1	Angle	3	PD	1
	90		Rear end		PI	2
	91	2	Head on		F	
			Pedestrian			
			Fixed object			
			Other			

PIONEER VALLEY
PLANNING COMMISSION
26 Central Street • West Springfield, MA 01089
(413) 781-6045